

SEQUENCE LISTING

<110> Nehls, Michael
Zambrowicz, Brian
Sands, Arthur T.

<120> Novel Human Polynucleotides and
Polypeptides Encoded Thereby

<130> 008535-0026-999

<160> 1008

<170> FastSEQ for Windows Version 3.0

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<212> DNA

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40

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<213> Synthetic

<400> 2

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<210> 3

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<213> Bacterio Phage Lambda

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<210> 9
<211> 171
<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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gggtaggaac acagccaaga acgattgcag gatgggtcct tccaggacac tgacgtctca 180
gcttgccgac tgtgagtccc tggacagatt actccacctc tctgaacctc ctctcactt 240
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<211> 241

<212> DNA

<213> Homo sapiens

<400> 11

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ctgntatgcc acagaagaca gaagataaca tgcttactac acttgtnaag caacatgcag 180
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<210> 12

<211> 197

<212> DNA

<213> Homo sapiens

<400> 12

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atcccgatcc ctctctcccc aaactacctg agccatggac ctcatctgtt ggacaaaatt 180
aaacttgcca ctttcac 197

<210> 13

<211> 387

<212> DNA

<213> Homo sapiens

<400> 13

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cactgttgtg gacattttaa aatgcaaacg ccttggctgg aagtcagaaa tcgtgttctc 120
tctgctaaac ctggtgtagc attaacacg cttgaagtgg aggcattctg tcaccaattt 180
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<212> DNA

<213> Homo sapiens

<400> 14

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gacacacaga gccacctat tgnctactg tcattcaagc ttaaaggaga catatctaca    180
gacagggttt gagcctagtn atggnganaa ctttcttgga tgtctcaaca ncctgganat    240
gannntccn acaaggcaga anancnaggt ggnacattgn tntattgct tttattcaa    300
ttataaaagt aatgcatgct tttgt                                     326
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<210> 15

<211> 166

<212> DNA

<213> Homo sapiens

<400> 15

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atctgggaca atggagcgtt cagcaccacg gacagcatta caccctctc aagtgttgt    120
taaggccatt tgtctatttc actctcaagt aaataaaaat atttt                                     166
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<210> 16

<211> 638

<212> DNA

<213> Homo sapiens

<400> 16

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atgacnaagt cccactgann acagacattc aagccatcca tgttagangg ganttgatnc    120
cnttgcttt tgnntgann gnganncttc ngngccang nnganntgtn gcagntcatc    180
tgnacgacc tctggtcat tgcattgcta catnatgacc aggttnnagt gattcccggt    240
cttngnctc ctgagaagct gggattacgg gcctctgcca gactgttca tagatgctca    300
agacaccagc aaaccagngc caccgaacaa gtatgagaaa agaacaggct agattatgt    360
atccagaact tcacaacct cagatctaga cagaaggagg tggacagtga acacagaaaa    420
gctgtaaggt gtctgtgac agatgtatgt ggtggacaca gcaggacca gaggaaggaa    480
gaaagaagct gctctgaaa agaccctcaa accacgatgc tcaaggaagt gtcgagagat    540
gaaggagagg tgttgccag gcagagcagt agagacaagt ttccgcatg ttgtcaagc    600
tggtctcaaa ctctaacct nacgtaatcc accccgct                                     638
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<210> 17

<211> 403

<212> DNA

<213> Homo sapiens

<400> 17

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canagtgnca cattaccta cttanaggg gagatnaaaag ccnactcta aggtcctta    120
ttccacagg ctgnaagca aacanggent acaggcttg cangagtga tctaattct    180
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cttactgaag aaaagtcaac agcagagaca ncacagaaaa aggaatcaaa gaggccaaat 240
 ctngggactc aaaacaataa gaaaaaataa atcaacttg ctaaaattta agaatgccag 300
 gggggtaggt aaatgcactg ggaagtatgt gtggactatg atgataataa atctccttc 360
 aatacaactg atatttatca gaccttgaat aaaacactga atg 403

<210> 18
 <211> 103
 <212> DNA
 <213> Homo sapiens

<400> 18
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 gatcagcctg agcaacatag ngaaaccta tctctaaaaa tac 103

<210> 19
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 19
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 cagtgtgtcc tggcctttca taacctgcac actcttgaag aggattgccca gcaatgtcgg 120
 agagtgaccc gcggtggggg tttgtctgag gcttactcac aattgccgtg gggtatggac 180
 ttgtggagag aataccactg acgcgagtgc ctttcacga catcacgtca ggggtgcaggg 240
 tattgtctg acttaccact gtgaagtcac ctttgatcac ttgggcaagg tgaactctgt 300
 gcatttctcc aacataaaagt tattatcttt ccc 333

<210> 20
 <211> 92
 <212> DNA
 <213> Homo sapiens

<400> 20
 gtggggcttt tcaagaggat cgcttcagg aggtcaaggc tgccatagcg ccaactgcact 60
 ccagcctggg cgacagggca aaacctgta tc 92

<210> 21
 <211> 259
 <212> DNA
 <213> Homo sapiens

<400> 21
 gaaatatat atgtagtac atttcatcct tggaattcct ctctcctgtg agtgcaacct 60
 gatttgagat gtaaataaac tgcggtgata atgccggagt ctctcagac gccagttct 120
 cccgccagcc gaggatggga gtgatgatga atgggtgccag gcccgctgca taatctttc 180
 tgtttaata ctgcattatc atgtccctca tcttccctgg acccaagact caacacatta 240
 aaatctcttt gtttctcc 259

<210> 22
<211> 270
<212> DNA
<213> Homo sapiens

<400> 22

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gtggacgtca agaggaacac accagtggaa gaagacacaa gtggtggat attgagagga    60
acgcactggg gaaagaacac accaaccagat gccatccagc tgacaggcca tccaccagtg    120
ccgcagagtt tggacagggc agaaggagag cccagccact gagcagcttg actccagggc    180
aaaaccatct tctactccg tctccctct agtccccc tttactgact gctattcca    240
ctcaataaag tcttgattg atttccaag                                270
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<210> 23
<211> 260
<212> DNA
<213> Homo sapiens

<400> 23

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gaggaaagtc aagtgtctt tgaattctt tggtgacct gaggtgggag gtgagaagag    60
cagtctggg tggactgtg cctggcagct accatcattg ccctcttcaa ccacagggc    120
atcaaggcta ccattgagt gctgtcttat cagtgaagac aacacaggga gaagatctca    180
tcagagggga ctggctatt tcagtgatca aaacatgctc ctaaactgg ataactcat    240
taaaagatgc caccttctg                                260
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<210> 24
<211> 238
<212> DNA
<213> Homo sapiens

<400> 24

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agccttcagg gaaaagcaag actgtcctgt agaagcacca ggaagatgtc caacagtgt    60
gtagtgaata cctgggagat ggggactaag ctgggaagct ggactgccct gattgagtgt    120
tgatcttcac cttgatgga gagagccata ttcttagttg gccctcagct tcatggctaa    180
cncntggggt taancntcn nggnttgga angnnaaang cttggacct ggttttga    238
```

<210> 25
<211> 209
<212> DNA
<213> Homo sapiens

<400> 25

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gtatggaaaa accacaggga gagggagaag cttgagatc acatggaaga gaactgagga    60
attgagctga caatgagaat tgaggccca gcctatggtc ccagttgtgt gtccagcca    120
gcatccagtt gttgaactg cctctatact agtaacaag taattaatta atacaagtaa    180
atgaaaacaa gtaataaagt aattaatac                                209
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<210> 26

<211> 528
 <212> DNA
 <213> Homo sapiens

<400> 26

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tctgactcct ctccaagttt tttgcagct tactcaaaag atgaggaagc tgatgccag 120
ccaagttcan atatctagta agtgacagaa cctagatacc aaccaagca tctgactcc 180
agagccttct tcgctgtacc aaaggcttag gtcactccac ttgtttgtt ctggtcaaac 240
atgtgttgac aatgtgtgg atgcacacct agaattgttt ggaaagatct gtgaaaatat 300
ggcagtgaca agatttcctt ttccaatag tttccacag taaaacacca gacattcatg 360
attcaaccca tgtctgggat tctgcacgat caagtgcctt cagtatttta agcttttga 420
taattcatag ctatcatgtc taaattgttc tgctgttct aaattgccc tgcattgtga 480
cctttcaaga taagtcttt cagctgataa actcctgttt taaatgc 528
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<210> 27
 <211> 317
 <212> DNA
 <213> Homo sapiens

<400> 27

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gacacacaac tggactacat ttcccacct catcagcagc gagatgtgac agagttctag 60
ccaacgcagc gcatctcttc aaggcctagg acatagacaa ttccctcttc ctctccagg 120
cttttctcc aagctgacgg gatgatgatt gccagacaa cctgggagc tgtgtgtga 180
agatgttaga accaccagca gtttgacttt ccagttaatt gcatggagcg gggaccctgt 240
acctttctct gccactcaa cagaaacacc caccttgaac tattatgtga tatacaata 300
aactccttt gtgtcgc 317
```

<210> 28
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 28

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atctactgg aggagacct gaggaacct aaaatagagg aaaaagtgt ttactcagac 60
ccagggagtg actggtgtg cagtgggtgag caaacgaag catctgcct taactcagtg 120
agaggatgac aataaataat catcaaacac atcattgcaa aataggaagt gaaataaaaa 180
gaagagcatg atgaaataga gaataacatg gggttgtgta tggatggaat aattaaagaa 240
ggcaagggga tctaatgaa tgagaagaag acaaaaatcc tgaagggaa agagctttct 300
tgcagaagga agactatag caaagacctc aggaaaatga gaaactgaaa gatgggcct 360
gtgactagca tgaagtgggt gaaggagaaa tgatgtgaaa ttaattgga aaaatcacca 420
ggaattanac ctctacagc catgtgccca agatgcagaa gccacttcat tcttgtgct 480
ta 482
```

<210> 29
 <211> 258
 <212> DNA

<213> Homo sapiens

<400> 29

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gccccatttc caaatatcat cacaatgaag attagggctt caacatacga attttagagg    60
acacaattca gtccacagca acgatgcata gaagacaagg caatatgaag tgagaacaga    120
ggtatttgaa gctgtcagcc ttcaagactg gagtgcagca gtgacaagcc gagggccacca    180
gaaactggaa gaagcaagga aggatcctct cctggccttc agaacttga cagaataaag    240
ttttttttt taagctgc                                258
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<210> 30

<211> 179

<212> DNA

<213> Homo sapiens

<400> 30

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gtaactgaag atttaccatc gtaaactctgg atgggaactg aattcctaca tcatagacag    60
tttcaaggag ggaaggatta tgtgttcagg aaatactctg cattctcaa actctacatt    120
gttggtgctt agatttgctc tgtgagaacc tactgaaata aaccatttct ctggaagac    179
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<210> 31

<211> 138

<212> DNA

<213> Homo sapiens

<400> 31

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agacatgttc tcatgatac ctgggctgcg gtacagtggc aagatgatag ttcaaggcag    60
cctggaactt gggctcaaat gatcctcctg cttcagactt ctgcctcaat gctgattata    120
ataaacatat tctatttc                                138
```

<210> 32

<211> 478

<212> DNA

<213> Homo sapiens

<400> 32

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gaccaggcta aaggaacaga caccactaca gacgtggctc tcaaggagag ttggagctca    60
agtggggaca aggcccttgc tgccacatc acgtaaaaat cttacgtgtc ttaaatgcac    120
ttcacgtcca ggaacctcag ctcaaagaa aaccaaacgc tcatgcttca ttaattccc    180
cttattcggc ctccaaaga ggtggagaat agctgggtgct cactgtccca gacactgaga    240
tggcatttca agattttctc tgcaatctgg tctctgaaca gacttgagcc tttgtctgct    300
ggttcccaac cctgggttaca catcagaacc atgtgctcca ggacctcacc tcttgagtc    360
tgangttgag cccaggaaac tctatgtctc catatttcca tccagacacc ctctctnttc    420
atgaaacct tgnaaatgnc ttactcantic ttanacatg gcttaaacct cacttttt    478
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<210> 33

<211> 227

<212> DNA

<213> Homo sapiens

<400> 33

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tgaagcagga agaaggaatc ctgagtcctt gggaaacaag gatctacctg aatagctccg    120
aatgcctact tctagatgtc ctttaggaa gagaagcaca cccttggtga ttcagccac    180
tgctatttaa ggtttaacct aatcatgata ttattggtt ttcttgg                227
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<210> 34

<211> 273

<212> DNA

<213> Homo sapiens

<400> 34

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ggcccagctc ctaacatgca ggtgtcacca gagagaaatg caccactgtg cccagcacca    60
tagctctggc tcagagagtt tgcctgagaa agcagcagac agaaaacaga aggtgcgagt    120
tgctcccgaa ggaactgact tcatgtgcaa cagagctcgg agaagtccaa ggctaagcac    180
actctccaga acagtggagg ttgtgtgtaa aggcaactgg gaggcgacgg agagcctggg    240
aggtgcgggc tacactggag gccagcaagt ctg                273
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<210> 35

<211> 366

<212> DNA

<213> Homo sapiens

<400> 35

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ataacagaga gcgcaaacia ctgttcaag gtcattggac tgaaagtac agagccagga    60
ctctgtccca catgcaaaga ctccacgcat catgcctatg atactcagag aaagaaggct    120
atcattataa agacctatac ttgatgctag aaattcaaga cgaagcctgg gcaacatagc    180
aagggtctca tctccagaa aaagaaaaaa aattaaaaat aggcatagtg aagcacactg    240
gtggtagtct tagctactca ggagactaag gtgggaggat ccccgagcca aggagtttga    300
ggctgcagtg agctatgcaa acaccactgc actccaacct gtgcaacaga gaaagacccc    360
gtctct                366
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<210> 36

<211> 262

<212> DNA

<213> Homo sapiens

<400> 36

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ctcttcaca tcctcttttg ggtcccggtt gctcagcaag acctttcttc cgactgcacc    60
tctctctct gctgcagtca ccgntgagt tgggccaggc agaattctcc caaatactta    120
aatgaaggcc cacttcaggt ttgggcctca ccgcagagct gagatgaaac atgcaaggca    180
ttcgggcccc tccccctct ggccccagct gaccttcac ccacagcact tacactcaaa    240
taaaagaaaa gtcactccct gc                262
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<210> 37

<211> 88
<212> DNA
<213> Homo sapiens

<400> 37
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gttccccagt aaatcacctg ctaccagc 88

<210> 38
<211> 119
<212> DNA
<213> Homo sapiens

<400> 38
tgaagtttc agaagctaca tgacacgcgg ttcaattccg attgaatgcg gaaggagata 60
tgacaacctc aacgtctctc attaaagccat acattaaaag gacttgcaag atgtaaaat 119

<210> 39
<211> 253
<212> DNA
<213> Homo sapiens

<400> 39
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agtcaaaatg ggagcaaaaat tgcattcatg caaagagctc aaagaagaca actaatcttt 120
gttctaaata caacatggga tcctcacagg tgggcacatt agaaaagacc actgatcaag 180
gaccaatcac tgcagcaagt atgtgagttc cataggtata tctgaatttc aaaaataaaa 240
agatgtctc aat 253

<210> 40
<211> 348
<212> DNA
<213> Homo sapiens

<400> 40
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aaactgggac gacaggtgca cgtgccacca taccagctt ccaggagagt ttcacgcaca 180
caggacagga tccaaaattg tctaacttc agaggaaagga ttaagaacaa gatttcttt 240
cagcatcttg tgagctctac tcttttcc ccctgcatg gcattggca tagtggtagc 300
ctatcctaaa tatectaatt gatttaact ccattaaaca ttaaaaac 348

<210> 41
<211> 265
<212> DNA
<213> Homo sapiens

<400> 41

ttncggagt gtggatgtga acacgccgtc ttgggtcctg aggtggaagc catgtgtgga 60
agatggaggg catnggttag aaggagtcta gtcctgatg gtcactgagc tgcagaacca 120
gcctgggctg ctcctgctg gatgtcactt actagagagc gaaattaaat gtgcttcagc 180
tactgttact ttgggttttc tgcatttgt agctgaaata atcctaata atagagata 240
tattaagtaa acaaaatgc aaatg 265

<210> 42

<211> 288

<212> DNA

<213> Homo sapiens

<400> 42

aaaacggcta aagcaagggt ggaaacagcc accaggacgg actggagggtg agctgtgctg 60
cccacagegc tctgcttact cccatcctgc ctatctctgc acttcagcgg gaactcataa 120
gacaccaccc tgctcctgcc cagcacttta tgtattcatg cacaggatgg aagacctcca 180
acaaagcagc attgttgatt tcttagtgtt ctcctcacc cagagcacat gcccaagtcc 240
cttccaaacc gtaaggactc ttggaaaata acaaatgaa ccaacccc 288

<210> 43

<211> 192

<212> DNA

<213> Homo sapiens

<400> 43

aattactggg ttaaaattac tgacctatca tcaactctga gagaagccac gtgatacctg 60
aagacattct gtttaccaga agtttcagt ggagaaactt ttcagaagt ctcctattgc 120
aattgacaag tcttgtgtt ctataatgtc attgaattg taaactatta aagtaatgct 180
cttttcatt cc 192

<210> 44

<211> 153

<212> DNA

<213> Homo sapiens

<400> 44

aaaatgaagg atggaagcaa aaatggagat ggaacgaatg agaaaaata gcataagaac 60
accaggatcat cgaggcgaaa gcagtgatat tatctgggaa actggaagaa atccaattgt 120
ggataaagat aaattacaga tgaacacagt gct 153

<210> 45

<211> 175

<212> DNA

<213> Homo sapiens

<400> 45

ggcaaagatg aaaccacaag agaaagcaga aagcagaaag aaggacaact gctatagact 60

ggatgttggt gtgcctcaa aattatgttg aagcctcatc accagtgtga tgacatttgg 120
atgtggggcc ttgggaggt gaatggtgat gagagtaaag cccgtatgaa tgaac 175

<210> 46
<211> 278
<212> DNA
<213> Homo sapiens

<400> 46
gntgatgtan acagtaacac caccaccacc actgnancca ctccattcca tctactatct 60
agaaagagca gttctcnaat gggaaatgat gaggtctcat gatgtgtcc aggttggagt 120
gcagtgggct attcacaggc acgatcatag tgcactgcgg actcaaactc ctcggctcan 180
ggaatcctnt ngccttagcc tctgagtag ctgagactac caaggctgag aaaattattt 240
caagctaggc tggnaaacac acntgtaaat agtatgaa 278

<210> 47
<211> 240
<212> DNA
<213> Homo sapiens

<400> 47
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actggcaacc gccatggaaa ggggttgaaa ccgtaaccac gaggactctc acattacat 120
gttactgact agcgaatgtc taggcctaaa acatctgccc tcttatagct gntttattat 180
tatgtaaaca tggctacaag atttctgaca taaaatagta gatgactcag tgtcttcaaa 240

<210> 48
<211> 306
<212> DNA
<213> Homo sapiens

<400> 48
gtgtctctt gatggtggcg gccacactc ctgaccagag ccaatgaaga agagggcaga 60
gcagagggga gaggggctca ggagtaaggc tgcaggaagc aaaggaagtg tcaactcaag 120
agccacaaac aacatcagct gtgcacctgg caaagagcct gtgaatcctt cagaattgct 180
attactaaag gcatccttac agtcaagtct ttgaacaatt ttcagattt atgtcatatg 240
aaaccatggg acagacataa accaaattgt aaaaaataag taaatgaaca acaaaggctt 300
taagag 306

<210> 49
<211> 265
<212> DNA
<213> Homo sapiens

<400> 49
gtggggtctt tcaggatgaa gtcatgggag ctgaacgaat tggcctgaat cccaagaggg 60
gagtgttcag ggcgcgctg tcctcggag aggctgaggt aacgctggct ccttccggg 120

agtcctgaa cgcccggctt tggaatctgc agacagctct tctagcaggg cgttggcacc 180
 tactgactaa ccgtgcaatc actcagcagc tgtgatgggt ggtgacatgt ctttcacagc 240
 ccaagatagc ctccttagac tgagc 265

<210> 50
 <211> 243
 <212> DNA
 <213> Homo sapiens

<400> 50
 tggggagctc ctgctttgnc aaaactcna gacgtnantc aanatgcaag aggaccatt 60
 cccacatggt tatgcctcca acaaactcagc agcaagcaca cgttgcctaa ccgcccacac 120
 cctcctccac aaaccacctt ggaaaaatcc cggccctcaa attctctggg agactaatct 180
 gactgacaat aaaactctgg tctcctgttc agctgccttt gtgcaaatta aagagtttat 240
 tgc 243

<210> 51
 <211> 181
 <212> DNA
 <213> Homo sapiens

<400> 51
 gtgcaacccc cagcccagga ggagacttga ctcgcctgag gtcagctgga gccaggaaca 60
 cttttgtgca acagctgccg tgcccatct gtgagagaca cgtggacccc gtgcctcgaa 120
 acaggtcctg ggagtgggtg aggcaccatg atccccctag aagattcagg gaaaaaaaaa 180
 a 181

<210> 52
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 52
 gccctacaa atgcattggac ttgactctn gccagacagg accaagtttg tcaccatctg 60
 gcaatcatcg tgaggccgga aggggagact ctctcagag cacttggtat gatgtccctg 120
 tgaagaactt tgtcagctgg gctggcgaag tgggtgtgatt tccagtgtag actccacacc 180
 tgaggtctc aagcccagaa ggcccttga ggtctcacta aagaggggct agcagcaaca 240
 tgggggagtc cttgggagct ccacgaatca gaatcctggt tctattattt atgaaggata 300
 attattaaag taaattcctc tgtctttagg tc 332

<210> 53
 <211> 461
 <212> DNA
 <213> Homo sapiens

<400> 53
 tgattccata aatggtcatt ataaaagaaa ctgcagaaat gaaaaaagct gtccatcata 60

attaaaggcc aggttggcac tgatcacaat ctacgtgtac ttcaggatga atacatgacc 120
 aacaatcttg tctggtcttc ctctgtgga ttatttgatt gaatgacttt caaagcctgt 180
 cttgttttg tgttgctata aaggaataac taagactggg taataactta caaaggaaaa 240
 aagggtttat ttggctcaca atactcatgt ctggaaaagt tgaagactgg gcatctggtg 300
 acggcctcag gctgctccca ctcatggtga aaagcaaagt ggagtgtcat gtgcaagaga 360
 tcacatggta ggagggggaag caagagaaag atgggggacg tgcccaggtc ttttaacaa 420
 ccagttctca aaggaccag cttgacgaga actccttacc c 461

<210> 54
 <211> 218
 <212> DNA
 <213> Homo sapiens

<400> 54

ataaggagga tcgtttgaga ccagcctggg caacaagagt gacacccatc tcagaaaaaa 60
 ttcaaaaact actcggccat ggtggatgat gcagcagaag gccttgcatc agagggcctt 120
 cttgtgaatg cttgtaagcc atcttatacc agatgcaggc ctcttgacct tggactcccc 180
 agcctccaaa actaataaat gtcttttctg tataaatt 218

<210> 55
 <211> 633
 <212> DNA
 <213> Homo sapiens

<400> 55

ccaaactgaa acnctcaan accagtttct gttatattaa caccttggtg ccggcaatgg 60
 atatcagttc gagaactaac ccaggggca aaaggactga catntgaaag cagcggata 120
 taactggtgg cntaagaat gagnetttat acgccctctg aagtctagag cccactgaac 180
 cctgaaggga gtaagacnga cgaatggaac tgaaaggctc atggentatt cacatacttc 240
 cgctgcttnt ctttgtgcaa gtngccgaag acatgccaca gntgctcgnc gnagtaacaa 300
 atgggaacta cataagtga cctgtaaatc ataacaatgt taggcgatnt ctcttataaa 360
 agctgtaatt cttaactct attgcccga tgaatatata tatacatata tacatatata 420
 tggtttgctt tgnnttttt ttttaaaana nagatttnc ntttttccc aaactggacc 480
 canaggggng attnaaatn acttgggnanc tccgcctttt ggttttaaaa naatttttg 540
 ccccgggcnc ccaanangcn gggattacag ggggntgcn cccacnccg gggaaaaatt 600
 tggntnttta anaagggggn ggggttttcc ccc 633

<210> 56
 <211> 650
 <212> DNA
 <213> Homo sapiens

<400> 56

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 tcaagtgggg acaaggccct tgcttgccac atcacgtaaa aatcttacgt gtccttaatg 120
 cacttcacgt ccaggaacct cagcttcaa gaaaaccaa cgctcatgct tcatttaatt 180
 ccccttattc ggtcttcaa agaggtggag aatagctggt gctcactgtc ccagacactg 240

agatggcatt tcaagatttt ctctgcaatc tggctctctga acagacttga gcctttgtct 300
 gctggttccc aaccctgggt acacatcaga accatgtgct ccaggacctc acctcttgga 360
 gtctgaggtt gagcccagga aactctatgt ctccatattt ccatccagac acctctctc 420
 ttcattgaaac ccttgtaaatt gtcttactca ttcttagac atggcttaaa cctcagctcc 480
 tccaagaagt cttncaagat tcaccagatg aaatgtatgg ccatttcttc tacattcccc 540
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 cattnccgct tctatattcc taacacctgg ccagaaaagg gctaaaaatt 650

<210> 57
 <211> 196
 <212> DNA
 <213> Homo sapiens

<400> 57
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 atatgtgagt cccccacca ctagaactct taagtggctg ctgttatgga aggtcaggct 120
 cataatcacc gcatattaag tccttaacag caatgtctgg ctcttcatta atctgtaaac 180
 ttactgattt accgag 196

<210> 58
 <211> 415
 <212> DNA
 <213> Homo sapiens

<400> 58
 ctgggattcc cgcaactgcc agtgggtccat ggtaccctca tccgccca cctcaagga 60
 tccagtgtcc cacttgcggc agccctgtgg ctttgcctgc acagctgaga cctcgaaacc 120
 cagctatgtg gtccacacc agacctacct ttctccctc tgtggcctgg actttccaga 180
 gaacacaagc aacaagaaga tcacaaccct aaggaggggtt gcaactgaga aggtggccct 240
 tctgcagct gccaggctgt tatctgcaca gagcattgca gcgtgagcca cctcagagat 300
 ggcagggcca gaggctaaaa aagcagcatt ggcacagccg cagggatgga ttgaggagc 360
 cctggaatac tccccaaaa atgccgcagt tagaatacac agcgtatcca ccagt 415

<210> 59
 <211> 177
 <212> DNA
 <213> Homo sapiens

<400> 59
 gttttatgtg catttctctt cacccaacta gaagacagaa gaaaaacagc tacacaggct 60
 tactgttctc tctcagacac ttgcaacaac tgtttggaat ggcaacatag atgcattgag 120
 taataaagtc acaacttctt gccaatcatt ttgggctaaa taaagctaac attccag 177

<210> 60
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 60

aaaaaacgtt gtttaggag tcggcatggt aacagggcca attcttttag agccaccaag 60
cttctccctg cagtcatcct gccatggt gttgatggcc ctgatggggc ttggagcccc 120
canaatgtgc agaanttga caaagggtgt ctcaaatgc aatggttgn ttatnaccga 180
aagcccacgg natccagagg aggcccttn ctncgaagt tacagagagc acaggtctct 240
gtacgtccca agtttccct gctgccaaat gcaggggagg agagaattct ggaagccac 300
cctgtcccat ggctccctg gcacatggag ccactgaatg tcttgaac attaaacaaa 360
tgctccaag tg 372

<210> 61

<211> 120

<212> DNA

<213> Homo sapiens

<400> 61

ggctcctct ccctgcccg caatgccatg cgagctgacc ttggacctgc gacccttgcc 60
ttcatctgtg ccgagaccta cacaacagt gatgaagcat cgcagccgga ggtgggagag 120

<210> 62

<211> 299

<212> DNA

<213> Homo sapiens

<400> 62

ctctgttaa gctacaatgn ntnaaannt tngtgncttt nttaccgcc caantnaaan 60
gntttttt gcatgatcaa gcccttctg atgcccttg tgagaggga gctccctcc 120
ctcagctct ggccacagt tatccgatg gccactgtcc cactgcagca cgtgggcttg 180
ttagtgtga tggctctgg agggctgagg ccacgtcaa tgcgtgtct aattcagctt 240
tgtatccca acatctcag caglacataa aacagaataa acactttgt ttataaatg 299

<210> 63

<211> 358

<212> DNA

<213> Homo sapiens

<400> 63

caaancngna atngaaaagg nnnngtcng ccentgggga natctntaa aattcagtga 60
annaaangac gaantacca ttaattttac catccagact gcacaaaat gtaacaata 120
ctgtntctc tctattaat aaacctgtac ttatatttta taaaattggg agcatatttc 180
atactttat aacttgtgt tttcatgtat atcatgaaca tttccaaga ttgttaaata 240
ctctgaaaac atgatttta atagtaatat taaatattg nnatattct ttgatagtc 300
cactatttat cctacatgat ctataacata agtataaata aaaacattt accctcat 358

<210> 64

<211> 195

<212> DNA

<213> Homo sapiens

<400> 64

acatggtgcc ctaagcagt gcgcagcctg tataattaca caaaggaagg ctggaaaacc 60
agaatgttaa aagcccaaga agaagagtag ctccaaagat ccaggaagca gagcaccatc 120
accaggataa atgaattca actatattga atcactgcat tgttccattc aagatataaa 180
ttccagagag aaagc 195

<210> 65

<211> 323

<212> DNA

<213> Homo sapiens

<400> 65

aaattccagg gactaatatt gagatgaacc aggcatgaga ccaagctgca aaattccaga 60
aatgacctcc aggtgttag tctacaaccc agccatcgtc aagataacat tagactgcgt 120
tccagggtgga ccatgactca agatagccac cagaccaagg cacggacacc tagcaccag 180
caccactcct gcattgcccc cactctaagt tcccccttat aaacacctct ccacagtga 240
aagttgaaa tcgtcttta agggcatgag ctgggccatt cccagatctt ggcatttgaa 300
taaagtagct ctctgttcat cac 323

<210> 66

<211> 175

<212> DNA

<213> Homo sapiens

<400> 66

gaatgagagg gagaagaaag aaagggagcc tagacagccg agataagcca agaggaggga 60
agtggagaaa ggaacactct ctacgtatgt caggcatttg gtacagaatc agagtccaa 120
atgggcacat ttgcttgccc aagcttaagt cacaggcttt tctaactgcc aaagg 175

<210> 67

<211> 243

<212> DNA

<213> Homo sapiens

<400> 67

cctgacttcc cagacacctg aagtgtgggg ccacactgtc aagtcgcccc ttgtcacat 60
gactgggatg tatatcacag atctgcttca tcgcagcaca gtctggaagg aagcctggga 120
ttccagggtt gggagagacc tcgagagaca gtcaagctca tcactcaac tgcaggcaga 180
gaaatgcaaa tataagagct gattcctaag gtttcttcaa tgaataaaat tatacaaatg 240
tct 243

<210> 68

<211> 179

<212> DNA

<213> Homo sapiens

<400> 68

ctggaatgtt aagttgagaa ttttcagca tctccctgtc tgccagatcc tatctgagat 60
gcctacgcta agaagccaac acagagacac gcaatgcaca ctatcagcag gagtggcttg 120
gaaattctga cttgtattga ttgagacacc ttcccacgaa gaaagatggg attagtaat 179

<210> 69
<211> 160
<212> DNA
<213> Homo sapiens

<400> 69
ggcagcaaac aagagctctg aaaggggaag gaagccagga gaaagccagc tccattagtc 60
acgcagcagc atatcctgtc acaaaggacc ccagttgagt aatcgcccaa aatatgcctg 120
ttatttttt ctgtcagaaa aaaaangggg cctgccaaaa 160

<210> 70
<211> 585
<212> DNA
<213> Homo sapiens

<400> 70
ctttcaacaa atgacacctc tctctgtctt caacttctc aagactttcc acacagtggg 60
agccccagag tgtgagtata agctgtgttt atcttcagg ttcaagcaaa tctactgtg 120
gtggggcaga ggaccttgag aaattgaagt tcttgaaaa taactcatct tcaacctaag 180
ggattagggc acctgagctt cgtctgaaaa gattgagcct gctggattga tcagcaattt 240
ccacatcagc aggaaatgtg ctgaccttac ttttctaag catttcgaga aaactgggtg 300
agaaaaaaaa gggggnnntn ttnctntna tnnccnntt caaattttn aanannacna 360
agggngaata ganagtggg ggttncaaaa ccaaaggnnt tgccaaactg ggnttggggg 420
aaattttgc agncaaaccc aaaagcctgg naaggcctaa aaaatttagc gngnggccn 480
ccnnnganc ggcaacntna aanaanggcc ttngttcctt ncccccccc ngnnccgttt 540
aaaaaaaaacc cgnggggttt tnaanngttt nnttgcccc caaaa 585

<210> 71
<211> 630
<212> DNA
<213> Homo sapiens

<400> 71
accaagagag ttctctgcca tgaaaagaaa atctgaggtg aagctgaagt tgacaaagt 60
caatctgaac ttaagaccaa ggacacacaa catgagcact tactttgaca gttctgacat 120
ttctcatca taaattctct tctatcaga caattcatcc ggcaaatatc gaaatattaa 180
ttctcgcc agaacagtta tgttaaagt tctgctgccc aataactgta acaaaaaaaaa 240
gtcaaatgat actgtatggt aattgattct aaaggacgaa gcttccgagt ggaaagggtg 300
acaaggaggt ggtgggtggg atctctgagc aggtagaag gaaaaggat ggagagagag 360
gcgggccagc ctgtaacaag agcaggggca gcccctccac tgtgagaaaa ggccaggagg 420
aggcgtcac ctggatgaag gatgaggcaa ctcaatctg acagcatcta catttcaac 480
caagtccat gatgttggtg agaggggagg aagtgaagta gggcatgttg ggagaggaga 540
gacttttga atgatcagct tggaaagtga agactggact actaaaagaa agaagtgaag 600

aatgattact tatgttttga gtctaaactt

630

<210> 72

<211> 424

<212> DNA

<213> Homo sapiens

<400> 72

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gatatggaca ggagacggaa atactgggta gaaaagggca gttccctggc aaagcctcac   60
cctcaagcct ggatacctgc tgtctaaac gaaaacgaaa acaggcattt ctgtgttcac   120
gtccaaaag ttatcttttg gcctgccaca cccctatnc tgcccatat gaatcccgaa   180
ccccatactt caaaagccga ccaacnagcc ccanaccaa canaaggntn gcngaacct   240
ntngcaaana aagggaanaag aggaggaaca ttgaaatncc naaatgagtt canctngggg   300
cngtcagana ggagtcanc cnetgggcng ccngaattca agggaggatc ancttttct   360
ttatccctt tctttgctt cccantcatt ctngtgaag gcccttenc ncttcattaa   420
aact                                     424
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<210> 73

<211> 410

<212> DNA

<213> Homo sapiens

<400> 73

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gagtaagaag caaagacggg tgtgggcatg tgactagagg gtcctgagga gcagaagatg   60
agttgcattg gctacgatcg cctgtttgac ttgcaaagca catggctctc actaacatca   120
gtagaatctg aatccatgga acagatcttt gtcaattact attgttatta gttttccttt   180
ttatctgata gttcagattc tgtaccctct tcagggttcc agaagatttc ttttctgta   240
aatcttgatg agaggcaaaa ctgtctccc actgtagaag tggaaggctc atttccagt   300
ctcccttgca gttgggggtc agaatatgac tgagctcttc ctggcagatg cacccttcta   360
tagtgcaaa gaagctgtga ggaggaggaa cattgctgga ggttggcggc   410
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<210> 74

<211> 337

<212> DNA

<213> Homo sapiens

<400> 74

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acaatgagcc ctgaatcctg ctacatcaga gagaacaaga tctttgcttc attccctgtg   60
gtaattacga ggtagaaag aactcaccag cgaaaatttc tggacctgat gcctttataa   120
acggtggcaa gtgctgctgc attcatggc ctcatatcaa aatacaacct cattagctgc   180
tgtgaacaca atgttctgt tgaagaatag aatggaatgg agttaagagt gtagaaggtc   240
tgatgcaaat ttactctac tcctattgac aaagagtttg aactactgaa ttgtatatg   300
aaagtcaggg catcctattg tttcagttg tcataag                                     337
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<210> 75

<211> 150

<212> DNA

<213> Homo sapiens

<400> 75

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gacgtctggg gagctcctgc attaatcag aactgagtgt ttttaagca aaaaagaaaa 60
aaggaaaaaa ggggaggaat gaaagagaca gagccggcca ctacatcatc tagcaaatag 120
aagcctacag acacttanng angncaccc 150
```

<210> 76

<211> 320

<212> DNA

<213> Homo sapiens

<400> 76

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gaaatcgaat gcctgtcttg aattcatgtg aagcacagag gtgccagatc tacagtataa 60
tgaagaacta aggctgcaaa tgcgggaatt gaaagaacca tcttaagga aaggatcacc 120
actccaagat ttaacaaaaa tataaaaaaca ccttccgtgt tgcttagtct caaagaaagc 180
ctgcaaatat ggatactgaa taagctttct caaggattct tctaaatcca gtcccatctc 240
tgtgggacgc tcatcctgt tggccatttc catctgaate actcctctc ctgagtttaa 300
taaagcacac gccgggcccc 320
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<210> 77

<211> 338

<212> DNA

<213> Homo sapiens

<400> 77

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ggttctttga gaggaagggtg gaggggagcc atcctaaaat ttgcagcaga gcctggcttc 60
taacacagcc tcagactgtg gatgaagcag atgacctgtc cagcttctt tccaacattg 120
ctgtttgagc gcatacagcc ctttcctgtg ttgaagacg ctagccagct cagccagaga 180
tgctctttgc caagtctgca gtcttgggat tagagtatgc actttaacaa atcttcttc 240
ttgagcagaa tgtagttggc ttgcttcacc accattcttt cctacctcca aagggtgcca 300
ggcctgctaa atagtgatta aacaaagatt aaaattcc 338
```

<210> 78

<211> 396

<212> DNA

<213> Homo sapiens

<400> 78

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tcggaattaa atcattgatc ccagaagaaa gggaccacca cagtgtctacg gaaaacagga 60
attgtgagaa gttatgggat ccattttagc ttgatttact cacagactcc ttaagcacac 120
ttcataagat gaggaactg agacactgga agaggaagta acttgcccaa tgcactcag 180
ccaggaagag gtggaacca gcattgaaat ccagacagtc taactccaaa acaataaac 240
aataccacca cactttatc ttctaggcta tacatttcta atggccaatg aagaaaacna 300
actgaaaaca aaattccttc ttctgntct tgnntattnc taaagggtgg ncttttagct 360
catggtngaa aattaaagta gtaacatggt ttcagt 396
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<210> 79
 <211> 83
 <212> DNA
 <213> Homo sapiens

<400> 79
 atcttcactg aggtggagga gcagtgcagt ggccaagaga aagatgggat tgacagagg 60
 aaataaaaag aactctgata tgt 83

<210> 80
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 80
 gtcatttaca acaggaatta aggacaccga aaaaaaatct aaagaaactg agaggtggaa 60
 ctgaaaatac agaagcagat ttgtggttg gaagggagct agncctcatg aaaaacagca 120
 acctggcaaa cactattttg gaataccgct atttcaaaa tatacatata tttttaagc 180
 ataaaactgc atttgaagtg gaaattaacg tatttgttt tagcacctca gctaagtatt 240
 taggatgcaa aaaaaaaatn taaattttt tggaaaaaga atcattcaaa taaaaccat 300
 taaaggggaa aact 314

<210> 81
 <211> 382
 <212> DNA
 <213> Homo sapiens

<400> 81
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 caagccaaaa aacctgaaac cacaggccaa agtgagagct tatatactg tttccact 120
 tgaatgctgc ttttccca accacccctg gccccgccct gcgccatcct gtcctatta 180
 aaacccaga ctcagctagt acatgggact atggctggac gtggganaaa agcagcttga 240
 cttcagaagg acagcttaac agcgttaact cggagaagaa tctggctgga gatgacctga 300
 ctnagggga aggnaatctt cctacccctc tcgattaca aggtccctt cactgngag 360
 gccctttat ttgccataa aa 382

<210> 82
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 82
 gtggatgaag ttgggtgctt cctgtacatt gatttgcct cttctggct caccaagaaa 60
 atcaagacca aaaaagtgc tgaaaccaa ttactgggg aacagatgaa gaggatccca 120
 agcaatggtt gagtctctc catggctcca gaactcacag gatagccct ttctcgctgg 180
 tccatggctc ctgctctgat ttagtatct ggttctggg atcaaataac atcatctct 240
 cccatcatcc ctccaggact aagggtagca atgatttatt ctctttgca gtctctgagt 300

cacatcagnt cccttgcttg ctttctcaac ttttctatta tctatgg

347

<210> 83

<211> 260

<212> DNA

<213> Homo sapiens

<400> 83

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tttcaagact gtaagtgcct ttcccagga tgccagcaag tactgagcct gtattttgag 120
ctgcatcaaa cctgttgga ataaaaaagg acatttctag gagatcagtc ttaagattg 180
gccccagttt cccagagta ggaagaggca ggaagccaga gcacatgttc tctccagaaa 240
taaagttgtt gcagtgcct 260

<210> 84

<211> 169

<212> DNA

<213> Homo sapiens

<400> 84

atnctgcaag gngtgngtgn ncttcccanc catggattac aggnaaaaac ttgactgcat 60
gtgatccttt gtagttaata acatgatgat tgtgtttca cactctcgtg tgagatatgc 120
ctccctcaaa tcttggcaca ttacccatct gacattaaaa aaaaacaac 169

<210> 85

<211> 238

<212> DNA

<213> Homo sapiens

<400> 85

cgctgcataa ttgtaccatg agccacgatc ctaagtcaag agacctttct ctcaccagt 60
cagatgattg ctccctccag gtgtgtagga gggaggatgg catggcttcc atcaaaccgt 120
gagcttttc agaacttcca acccaccata aagctcatct gaagaatgtt tgcctttccc 180
tgtcaaatat ttctctgatc caaagtctgt taacaattta aacgtcaaat cccctct 238

<210> 86

<211> 634

<212> DNA

<213> Homo sapiens

<400> 86

agtgacatgc ttgaggaaga gtgatgaata atactgagga tgattcaacg tctcttggtt 60
ttacttctgc accacccaaa cagaaaataa ttagacaaga acatttcttt ttctatatca 120
gtgtcataac atgtattatt acagtgcggt gtaaccacat gtcagaagag aatgtgtagc 180
tcaaacacc gaactagggtg gagaggccga ggccttaatt ctccaagaga ctgggacctg 240
tgctgggttc tagcgctgt tcagcgtcag aatcatcagc tggctgtgag cctacgtgaa 300
ttttctcca ctcaatctca tcactcttca gacaggcgga gagagcgga tccatctatg 360

agatttctct gctgagaaat ctctccctc cctccaatga agcaacagca ggtcatatct 420
 gaatgcagaa gcatggcctt gtgctgggaa aacacatcct ggctgtagag ctctcagget 480
 ttagagtca aagccaaggg tcaaatcct ctctgnetta ctcaagagcc acatggctct 540
 gagacagtga aagtaactct gtgaacctca gttaccaat ctgtaagatg gggatcataa 600
 tgtaaaaaga tggcattaaa acttacattg ggaa 634

<210> 87
 <211> 180
 <212> DNA
 <213> Homo sapiens

<400> 87
 caggccttgc ctcatcaagg tcagagcagg gcttcagggg gnttacntg gatangactt 60
 cttnnantng tnggnnt gntacctt tgagcaagt cagcctggt aagtccaagc 120
 tgaattggcc aattctttg cnnnttacc tggaagaaat atcataagc cacctctgtt 180

<210> 88
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 88
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 aacactcccc aggtacaac agnccgctc cctctgaaa tcaggacaca agaattgaaa 120
 gaaactggaa cagatacat acttaccct ggcatccaga acccagagc atcttccca 180
 caaattgggt ataacaaatt accacaaact cagtggctta aaagagcacc aattaggggt 240
 ctgcatcca aaatatataa agagctctt ttcatatat atccatacta tataaagatc 300
 tctcacaaca acaaaaagat aaccagcca atttttaaa aaaggtcaaa aatggaaat 360
 ttctcaata aagatatata gtcaac 386

<210> 89
 <211> 595
 <212> DNA
 <213> Homo sapiens

<400> 89
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 agttctctgg aatctgagaa gtcaagcagg gcttctgcct tgtcatggt gagcctaaac 120
 tgtgatttcg tctctagaca tgacacatca ggcatgcctg gatctgggtt ttctgccaag 180
 ccttctgaca gtaacgcagg catttgctag tgtatatgga ggaaggctga cttgaagtc 240
 ccagtacatt tcaccagtg agaagaggac aacactgact ccagaaagcc tttgctgac 300
 ctgctctttg aaaccagtgt gctgccagg aatcctcgcc ctgtgccccg cctacactca 360
 tccccaccta cttgtccac tetgccgcca cagcttcagt caggctctca tcccttctt 420
 cacttcatta ccactaaaga aagcctctc ctgggtcccc atgtccagt ctggctccct 480
 tccgatgcac cccccctgca gctgtcagtc atgntctaa aatgcaaac tgaccatgcc 540
 actctgctta aaactctca atgactatgc taacattaaa gatgaagcag attcc 595

<210> 90
 <211> 159
 <212> DNA
 <213> Homo sapiens

<400> 90
 gctgtgaaga gctcctgggt tgctgaacaa atggagttgc tgcaaggatg ccatgcctgg 60
 agagggcctg gaagccctgt gccacacccc catgccttgc cctatgtaca tttcatctg 120
 catcattggc aacatccttt ataataaacc agtaaaagt 159

<210> 91
 <211> 555
 <212> DNA
 <213> Homo sapiens

<400> 91
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 aaccttagg aaattcttt ggcttctgga tttttccag tttttgaag tgtttcctca 120
 gaaaagattc gcagaagtaa tattagtcca agagctcata agacattgag agaataaat 180
 aacacccatg taaaagaacc taatctagt cctgggacat ggcagatgct caaatgttg 240
 atctaaatg gatgaactgt caagtcatca aaacagggat tcgcttaaag aacatagtgt 300
 tctgccttct agctaagaag cattcgatcc acttaactga attgtgaaac tgcaagataa 360
 aggataaaga gcgctgaact gggcctccat aaaagtgaac cacagatttg ctcatgagct 420
 gtgtgacttt ggaccaatca cattctctgg gctgtggcc cacaacggat gagtcatgaa 480
 catttatctg tatgtctgtc atctccatta gaatatgttc atataggatt atatgtccgt 540
 gaagacggga cctgt 555

<210> 92
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 92
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 gatctcaagg taattagtct acagcccagc cactgctgag atgacaccag cacacgtcc 120
 aggtggacca tgactcaaga cggccaccag aacaaggcat accgacctta cactcagcac 180
 catgcccgea tgctccctc tccaagtcc tctttaage cctctcccc agcctaaagt 240
 ttgaaatgtt tctgtgaagg aatgagcctg gccatttccc caaccgtgg cttttggaat 300
 aaagtcactt tcttttact gc 322

<210> 93
 <211> 634
 <212> DNA
 <213> Homo sapiens

<400> 93
 aaacttggag gctcagaccc tggtttaatg tgccttctc ttactcctga gttgcaagca 60

gtaataaaag aggggtgggtc gtgtacagta ctcgatcagc ctattccact agatagattg 120
 gtagtcaaaa gtattgaacc actccatgtg tcagtctttg ggctgagaaa tgcttttctt 180
 atacaacacg aaaacagata tcgacagtgt atagcagcat tcttattaca agcccaaacg 240
 gaaaacatca aaaaaacatg gatggcacia ataacaactg caatttcttg cttaccaag 300
 agtcaggaaa ccaagaaaat atctttattc acattgcccg cagaatcctc tgaaatttag 360
 ggacctaaaa caagtggcat gtctttttag aagattatgg ttaaggtat aatttcattc 420
 aaagttttgt aacacttagc tagtgataag ctaggaggaa atttgcatTT taaagaagtt 480
 tcagaatttg aaattttgag ctaggaaaat cctcagtatg gaggaataat gactgcaaca 540
 aatttgaact ctgaggaatt tcttgacaaa tatatactgg catccagatt accttcta 600
 gcttccgtc angtttggnA agaggtgtga gtga 634

<210> 94
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 94

gacaagctgt gaaatgccta gattccagag caacagactg tgatccattc ccaacaaccc 60
 ctccctaccg tctgccacca gtcccttaa agcaggaatc agagctagac tgactcaact 120
 aagaattgtt ttggagaact tggaaactcaa cattccanaa agcaagaagc ttgacatagc 180
 atcgatgagc ccaagtcaac tatatgaaca aaacaatgtc tcaggagggg cagggtatca 240
 cgtcagaaga atcctgagtc cttagatgac cttgtagaaa agagccacaa acttactctg 300
 ggctaccttc atacctctga actattatgc agagagaaat aaatg 345

<210> 95
 <211> 256
 <212> DNA
 <213> Homo sapiens

<400> 95

ttcatctggc tctccatgaa tgcctgctt ttctggaaaa ccttcttgct gtataaccaa 60
 gggccagagt atcactacct ccaccagatg ttgggggaac tgccttgaaa cctatacatt 120
 tcagatgggc acccagagag taagacctca cctcgccct caagttgctt acaatataat 180
 ggaaaaacca acaataaat aattataatt caataacaa gaaaagggtt cttctaataa 240
 acacatgagg tctgat 256

<210> 96
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 96

agacactgct agcagtcacc tagaggacgc tgcattccag tcttgccat ctctctggg 60
 tcgtggcct gtgcgcccaa ccacagaagg ccgagggtc ctgcttctg gggaaggatt 120
 ctgggaatga tgagtacctc ttgcttcag acaataagac aaagaagaat ttgggaaac 180
 tgtgtctggg gaaacaaaga aaaaaataaa ttatccttta gtanaaacag aaaaaaagg 240
 c 241

<210> 97
<211> 262
<212> DNA
<213> Homo sapiens

<400> 97
gngtttngcn aantccagcc tgggaaagct ggcagaggat gcaccgtgtt ttactcacct 60
gagtgnnttac aatgctcgtg aggtgcctcc ctgatatgtac agaggaatga agaaggaata 120
aacagacctt ctggataatt gcatcagcct tccccactat tccaatgcca tgctaacatt 180
tcaagtagtg tcccttttgt cttgccgaga aaaaatcatt tcatgattta ttacactgga 240
ttaaaggcta tgcacactct gg 262

<210> 98
<211> 155
<212> DNA
<213> Homo sapiens

<400> 98
gtgctatcca acatggacgt ctaatcttta tgtaatttct tggagaagaa acacctatca 60
gttggagagt gtgtaaccac tgcagaggaa ctctacgct ggaatacaag cataggccaa 120
aaccttttct gctcagtaaa actcaatgta gttag 155

<210> 99
<211> 242
<212> DNA
<213> Homo sapiens

<400> 99
gccagctacc tgaggaagtc caactaccct gaaaccacca tgctatgagg gcgcccaaac 60
ctgccaggta gaaaggccac gtggagaagc actgaggtag cagacatgtg agaaaagatg 120
tcttggacct tccagcccag ccccgccacc aactgaacac agggaccagc caacacccca 180
tggaacagaa tgaactagt caactcatgg aatcttaaga aacaataaat tgttggtatt 240
tt 242

<210> 100
<211> 54
<212> DNA
<213> Homo sapiens

<400> 100
gaatggaaac tgaaagtgga aatcaggaaa aggtaatgga agaagaaagc actg 54

<210> 101
<211> 270
<212> DNA
<213> Homo sapiens

<400> 101

gtgaaaactg aggnanagag atggacgtgc aggatagaag gngatnnatc naaggacaca 60
ctgctggctn taggccgagt tgcagntaaa atgaaganct cngattcct ggcctcatcc 120
ctttctcctt ttgnatgtga ttacataca aatntatata gaaaaccaag anaagttta 180
ttttaaagn actatcctta ctatgtgtga caaactaaca tttctattg ttttttatg 240
aattactagt cacaactcat taaatccatt 270

<210> 102

<211> 287

<212> DNA

<213> Homo sapiens

<400> 102

gcanancaca gnatgggtgac actgncctgc ttcatgaaca cagnaaatgt tgctgagaga 60
tcatggcatt ttctctcctg ctgagactaa gctgggcttc taaacctta gagaacactc 120
caggaaactt catctaattg gggttactgt cttggaatca gatgattatt aaaatgcttc 180
caattgtatg tagtatatat gatgtagtat actacatggt tgtgcattat agttaattac 240
atacacacat attttggtg tcaaaagatt ataaatcct atagact 287

<210> 103

<211> 535

<212> DNA

<213> Homo sapiens

<400> 103

ttttcataa aggaaagcag catgctgtat agatgagaga agacatccaa aggaagaaga 60
tgcaagccga aaaaaattca agcctcccat ggcgcttica gaacataccg cagatctcat 120
gtggcacagc cccagcctg ctttaaaaga gcccatagaa gagaaatcag ttgtgcttg 180
ttgtgtctgg gagaataact aatctcagga ctctgttica ggtgtcctct tgatgggtgc 240
ggcccacact cctgaccaga gccaatgaag aagagggcag agcagagggg agaggggctc 300
aggagtaagg ctgcaggaag caaaggaagt gtcaactcaa gagccacaaa caacatcagc 360
tgtgcacctg gcaaagagcc tgtgaatcct tcagaattgc tattactaaa ggcacctta 420
cagtcaagtc ttgaacaat tttcagatt tatgtcatat gaaacatgg gacagacata 480
aaccaaattg taaaaataa gtaaataaaa caacaaaggc ttaagagat ttgc 535

<210> 104

<211> 381

<212> DNA

<213> Homo sapiens

<400> 104

ttctaggcc cagatgtcca cctccttica cgagctnaga attgagctcg tatcgccaac 60
atgttttgcg gaaatgctca tatcaact tggatgaacca ggaagactgt accctcatc 120
ctttntcctg ctgcctgcta ggttgngtta gaaagcttac tctcgagttt tactggcttg 180
cttgtgcttt ttggcatttt caaaatttg tacaatgac tcaaaaagc aaaaatacat 240
taatttttt aaaggttaga tccatatan atnggatctt catcttctaa cactttggag 300
aacagaaaag tggattttgg agatataatc ttcataagaa ttnggcncnc taataaaga 360

gccctggaag aggaaagaaa c

381

<210> 105

<211> 177

<212> DNA

<213> Homo sapiens

<400> 105

cagaaactga ggtacacaga agaaaggcca tgtgaggaca cagcgagaag caagtatctg 60
caagtcaana anaaagggt taaaanaacc ccacccttgc cgcaacttg ntctttgctt 120
tctgggcctt ccagaaactg gtggaaaaga agtaaaaatt ctggttggtt taagccc 177

<210> 106

<211> 245

<212> DNA

<213> Homo sapiens

<400> 106

ggggagctcc tgcattaagn caaaactnac aaaggttggg gnnaaacnct ccactcctgc 60
ttcatacca ttgaagttc agaccagtga gatttccatc agttgggagt ngaagatgcc 120
acaaggacaa gaactgagga tggtttctc agagctgatt ttagacacc attttccagg 180
gatccctggn gacagaggag cattttntt gtggttgagt tctgaattaa aaagtgtcgt 240
actat 245

<210> 107

<211> 195

<212> DNA

<213> Homo sapiens

<400> 107

gaatttgccg caccacaggg attggacca ggtcacaacc aaggaagctg cacaagatct 60
gaagtgttag ccattctctc tcaaccaa gcatgtgctg agtcctcata tgctgggggtt 120
cttgcaaata acttcatgt agaataaaat gcttattaaa gggtcagtaa taaaatgtgc 180
tgttttgaag cgtac 195

<210> 108

<211> 160

<212> DNA

<213> Homo sapiens

<400> 108

gaaagaaaaa taaacatagt catcagcact atgaaggatt ccaggaagtt tgacatcaga 60
gaatttctca actctaaaa gctggaaacc cctgccctca cgctggaggc cgttttgatg 120
tccccttggt acttttgagt aaatggaaac atcttttcac 160

<210> 109

<211> 155

<212> DNA
<213> Homo sapiens

<400> 109

gaagctcttg ttgaccttc tgaaaaaaat cttgaagtat ctatgagaac agctattata 60
tgaagcagag attataatag atatggagtt taagttgcag aagaagaaga ctgaattatt 120
aaatgggaca tcagaaaata aaagctcttc ctttt 155

<210> 110
<211> 346
<212> DNA
<213> Homo sapiens

<400> 110

atttcagagg aagttgtcta agatgggtgcc aggtcaccag aggtgccaat gcaggacaca 60
ggcaatgccg tcaaggttgt atccggtgag gatgaccaca agcaagccag gtcctagacc 120
taaaggatac acctgaacgt gtctgctgtg aggaatgggc cagaggatta tgtgatgttt 180
catattttt ccttgggact ttcatgtttt tccaagtttt ctgccctgag atgcattact 240
gaactctgt tttctcttt actacactgt gaagtaaagtg tgtgtgatga gtcactggcc 300
ttgccaggc tgtgatcttc ccaagaatga agtccctatt taattc 346

<210> 111
<211> 275
<212> DNA
<213> Homo sapiens

<400> 111

gtgatgtgac ccagcctgtg gcttccactg ccatccacac acgtcgtgc ctctctccac 60
atcagcatcg caactatctc ctggaagctt tccaagtgtc gaactacagt aacctcagcc 120
gaactgtgtg tcatcaccac cacaggcttg cccctcctct gcatctttgt gagaacctga 180
gagtcactct aaactcctcc ttccacctca ctccccacat caaatcgatt accaactgt 240
gctgatttta tcttcaaata ctctccagaa ttgtc 275

<210> 112
<211> 205
<212> DNA
<213> Homo sapiens

<400> 112

gaggagaaaa gagaaaggaa ccctccatt catccttccg tactactact cagaaccaag 60
tacctctgct tctaaactac atcagggagt gcaactccca tggaatcaca ggacaagaag 120
aatgggaac agatatttaa gttaaatgat ggcaaagaaa ttggaaaag gtaaaaagtc 180
agagaaagag aaaacaatgg tggac 205

<210> 113
<211> 487
<212> DNA

<213> Homo sapiens

<400> 113

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gcaggtcagc tgggaaaagg cgaagggatc ctgagacaat ggtggattgc tccgaacagg   60
agcagcctgt tcgggccgag ctccggttcc ctccgagagc ggtttgcaa ttctcctaa   120
tgtgggagac tgggtcacca ggccaagtgg cccccactgc cccttctcaa ggcactgtga   180
aaccaaatgg aatttgccac gaaagtggct cccggggggc ttgagaaggg atcagctgag   240
gaagctgcaa agctggtaac aggaggggac aggccgtggg tggcgaacaa gcaactgctt   300
gtctctgcag agtgatgccg gctcaaaatc gaaccactgg ggctcaaaa ataaaccaac   360
gctgctgaa aacacaactt gcagaaaaag aattgttctt gaaatttcta ttgtgaactt   420
ttaggnacc aaacttttga aaaatccaag ttttntgca ntttgccaa ncaagggggc   480
atgaccg                                     487
```

<210> 114

<211> 251

<212> DNA

<213> Homo sapiens

<400> 114

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actgagggat gtcaagcagg tccccagaag aaaagagatg gcatgcaatg taaagaagac   60
ggctggagct gaatcagcca tctttgacta tgggtgtgct ctgagaatgg gatttgaca   120
aggctaagta acatcataga agtagcccag gtgcctgagg acttcaaaca cccaagcctc   180
cactacagcc tcaatttct tccttacatt gtttatgtga gaaagcaata aacttctatt   240
ttggttaatg c                                     251
```

<210> 115

<211> 139

<212> DNA

<213> Homo sapiens

<400> 115

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gngaggncac agcaatctc cngaggatgc agnngcaaga caccatcttg gaagcagagc   60
agccctgacc agacaccaga tnggncagnc cattgatctt agacttncca gcctnagaa   120
ctatgaaaaa taaattgtt                                     139
```

<210> 116

<211> 489

<212> DNA

<213> Homo sapiens

<400> 116

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tagacgactg gtctttgctg gcccaaactc tcaaccttgc caagacaaca atggcagatg   60
tttccatatt ggagaggcag ctggggaagg ggatggaagg caagaagaaa tgatagataa   120
attggtctat agtcaagtaa attgccactg tagagacaag agatacaact tgtaacacag   180
ctggcctgga ctgacagaag attcagtaac aatataaaat agcaggaatg atggagctgt   240
aactttgtgt gattctcaa catctacctg gaataatcaa ccatcttcag gattgcaagc   300
cccaccactc ctgtgttgc ttataatcaa aatgacacac ttgggcagtt tctccaactg   360
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cctgataaat tcagttttca aatactaagg tactatatgg catggtgact ttaccattac 420
 tccagggtgg gaagtgactt tccactgttt gcggattacc aaagggaata aagcatattt 480
 gacagtccc 489

<210> 117
 <211> 614
 <212> DNA
 <213> Homo sapiens

<400> 117
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 tggcatcagg aaaccaggc tcttcgaaat atgcagtga aaatgaaacc ctgcaagat 120
 gagacatttg ataaagaaga aaacatcaaa ttttcttgaa gctttcctct cactgtaact 180
 ctgcctcctt ggattgaagc tacagagaag aatgcagcct gcgggtgctc atgcctgagc 240
 atcatctcct cttttccacc tgctgagcta tgtctaaata gacatcctct acctttggcc 300
 caaaactttc tgttctgaa tagaaagaac attctgtca tatcaagagt tctgggatat 360
 tctgggagca gtttagagct ttaatcagt ataaagtttc ttttctcatg aaaagatctt 420
 gccacagggg atgagaaaca agctattgag catctaata atgtgtatac catgctaata 480
 aattgtcata cttcaagtct atttaattaa cagaaacacc ctccaaggaa gtcttatccc 540
 ccctcaatta agtagattaa aaataaacg tcttgggaga agataagggtg actgagctta 600
 taagaagagc ccat 614

<210> 118
 <211> 134
 <212> DNA
 <213> Homo sapiens

<400> 118
 gtagagaaat ggagccacag atcaagggtca cccagtgagt gagaagcaaa gtctggagct 60
 gaggcaagtt tttaaaattc ctcaccaag gctttctctt ggaaagccca aagcttatta 120
 aatccttaaa gggc 134

<210> 119
 <211> 181
 <212> DNA
 <213> Homo sapiens

<400> 119
 caaaatgaca tgaatgactg aaaaagcatg tggagcacaa gactcaagaa ctaagtgaat 60
 ggactcacac ttctgattt caagtaaagc tacagcaatc gagacgtggc attgatgtaa 120
 gaatagacac atcaatgaat gaaacagaat acatcttcca gaaataaatt cacacaaata 180
 t 181

<210> 120
 <211> 182
 <212> DNA
 <213> Homo sapiens

<400> 120

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gcttttccaa aatgtgaggc atatggaaaa ttcaggcaac accctgttac ttactcatca 60
cttaagccat gttttggctc agaagatacc aagcaaagct gaatattact gtatttcaga 120
aaggggagta ttcttcagtg gctcatcttg ggggtcttca taaaaaatga ttgacagctg 180
ac 182
```

<210> 121

<211> 424

<212> DNA

<213> Homo sapiens

<400> 121

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gtgtaatttc tcagaataat ttactctct gatgaaagga gggaataagg taacgagatg 60
ttccctccct cccttctcac attggacctt gtgtgaggac gggacactgg agctgctgtg 120
gccacctgga ccaagagaat caaggaggag ctgacccaaa ccctgatgct gcaaagccat 180
tgccacgcgc tggcattgtc cgcctctgga gtccttgta caagagaatt ataaactcct 240
gttgttgaga ctttgagacc ccatggcgga gacggagggt ccttccactg cagcacaaag 300
tggggcactt gcagtcacat cgcctgtgtt cacggtggag cggatctact gccctttag 360
ggctgatgca ttgcaagggg ctgaacctcc tgcactgtct cctcttggtg tatggagaag 420
gaca 424
```

<210> 122

<211> 197

<212> DNA

<213> Homo sapiens

<400> 122

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tgcggaaatg ctctatatca acacttggcg aaccacggaa gacnngcncc ctaattcctt 60
ttctctgct gtctgctagg ttgagttaga aagcttactc ttcgagatac tactcggtc 120
gctatntgnt tnttgccatt nttcaaaatt tnggtacana ttgattcttc aataaaaagct 180
nnaacataca attaaat 197
```

<210> 123

<211> 146

<212> DNA

<213> Homo sapiens

<400> 123

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atgacaactg gagtctggaa gtacagggaa ggagaaaagc ccagcgcatt tctgaaaagg 60
ggaaggagca tggccctgca gctttntcta gatcctgggt ctnacagcatg ganggaaaaa 120
catctcatcc aatcaaaatg caagcc 146
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<210> 124

<211> 229

<212> DNA

<213> Homo sapiens

<400> 124

gaaacgacna ngccnaatag aaaattttct aaacccccat gaagctagaa aacatggatt 60
agtatgagat gagaaaacca aggctaagag aggacaggag tatctcttct ctacacaaag 120
ccacttgagc ccatttgaaa tgtaactttt gccatggaag aattctacca acacntttgt 180
cgtcatttaa actaccact aaataccttt tctattttt atactatt 229

<210> 125

<211> 500

<212> DNA

<213> Homo sapiens

<400> 125

ngcgggtgctc caggtgtgaa tggagacgac ttcgagctca ctgtgctgag aaactgctt 60
tcagagggct tctacagagc ccacagctca tcttctagaa gtcactata gctactgtca 120
gtttctagge ttccaaggac acccttcagc ctactgcaat gcagcttctt accctactcc 180
tccatggaca gatgacatcc atttctgaaa tccagggggc acacttcaat ctatctcatg 240
aggtatctct gcttggtgga caccgatgtt ctcccttctt gaagactctg cttctctgac 300
ttctgtgagc atagcctctt ctggctcactc gttctctggc atagacttct tctctgtggg 360
ctggtagcga acagtggggc cttcagcatc attattgctc aggtcagtag aaaggaccac 420
ataagggagt atgatatga ggagccaaga tcactccata tctcgagaag agatgatagc 480
agcctggaat ggtttggtgc 500

<210> 126

<211> 167

<212> DNA

<213> Homo sapiens

<400> 126

actgaggtgg atgcgnccat cttggaagcc atgttaaaga aggcagagcc acaagataga 60
tgcagccggg ttctctaaat caccactggg gagaaacca cacaccaatg aggaataccc 120
atTTTTgga tTTtaagagc aagaataaaa ctcaattgt gttcagc 167

<210> 127

<211> 63

<212> DNA

<213> Homo sapiens

<400> 127

accttcggggc aaggaccttc acaagggatg cagtacatgc tgtgaagaa gaaaaaaaaa 60
aat 63

<210> 128

<211> 340

<212> DNA

<213> Homo sapiens

<400> 128

cccaagctgt tggccaagga gcttcttgac ctgtggctt ctacttcaa tctgaaggaa 60
 aaggagtact ttggaatagc attcacagat gaaacgggac acttaactg gcttcagcta 120
 gatcgaagag tattggaaca tgacttcctt aaaaagtcag gaccgtggt ttatacttt 180
 tgtgtcagag gggatgccac ttgaatctcg tgaacctgg gtagttatc ccaaatagga 240
 gtggtcgaaa ccagcagca aaccacaggc ccatctgcat ttctgcaa gggaggatac 300
 agcttaataa cattcagaa acaataggca ttttctgtc 340

<210> 129

<211> 594

<212> DNA

<213> Homo sapiens

<400> 129

ggaaacagaa gactttaaaa aaagaaagga agaaagaaaa agaaaccacc aactctgcaa 60
 agttctctgg aatctgagaa gtcaagcagg gcttctgcct tgtcatggt gacctaacc 120
 tgtgatttcg tctctagaca tgacacatca ggcatgcctg gatctggtt ttctgccaag 180
 cttctgaca gtaacgcagg catttgctag tgtatatgga ggaaggctga cttgaagtcc 240
 ccagtacatt tcaccagtg agaagaggac aacctgact ccagaaagcc tttgctgac 300
 ctgctctttg aaaccagtgt gctgcccagg aatcctcgcc ctgtgccccg cctacactca 360
 tccccaccta cttgtccac tctgccgac agcttcagtc aggtctcat cctttctc 420
 acttcattac cactaaagaa agcctcctcc tgggtcccca tgcctcagtc tggtccctt 480
 ccgatgcatt tccctgcag ctgtcagtc tgggtctaaa atgcaaatct gaccatgcca 540
 ctctgcttaa aactctcaa tgactatgt aacattaaag atgaagcaga ttcc 594

<210> 130

<211> 152

<212> DNA

<213> Homo sapiens

<400> 130

gtcctaggt ggaaggactt gccttgagtc tcagaagaga ctttgactt ttgagtgat 60
 ctggaatgag gtttgtcaaa gatcagcatt cttatacacc aacaacagac agagagccaa 120
 atcatgagt aactccatt cacagttgt tc 152

<210> 131

<211> 265

<212> DNA

<213> Homo sapiens

<400> 131

cttccaaagt taaatgagat gccagtcaca attcaggatg ccagaggctg gcagacttct 60
 ccaagatgga aaaatgaaca ttatcaagc acctgcttg tacacagatg cttactcagg 120
 caaatgcgtc acagtgaagc actcacagac atgtacagtc ctccaggaag gtcttcctt 180
 acctgaaca aattcagatc cttgccgttc caactgttc cgtagcttct cattgtttt 240
 aatagattct tctaaacgct ttctc 265

<210> 132

<211> 374
<212> DNA
<213> Homo sapiens

<400> 132

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ttgatagcaa ttagaaca gatattaga actggagaag cactgctagt ctggtacatg    60
actgagatgg aacagaacaa gaaaattata caaagcagtc agaagaacct gaagaataaa   120
atcagctgga gctactcgtc tcagggaaag cggccttggc tcctcgcgcc cgagctgccc   180
taggaagcac gttggactga gaggaggcag caccttgacc tcctgtgcat gctcagggcc   240
ctgcatcaga gccttccttc cctccactct tcttcctt tttctggctt tcttctctt    300
ctcatcctat aaagaaagta aggtaactta ctaaattaca tacaatcaaa taaagtttaa   360
aacatagcca ggag                                     374
```

<210> 133
<211> 496
<212> DNA
<213> Homo sapiens

<400> 133

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atgagaaaac aggctgggca agngaaatg acaacaaaac cgtactgtaa caaagctgcc    60
taaccacctt gcaaatctac aattgagaaa tccatttctg ttgccctga gatttgtggg   120
gtgtttgta agtagcaaaa gctgactgat acaagattca aactcaagtt tcttgattc   180
tgtctgcatc accatgctgt ctcactgaac ttacagccct gattcctgtt cctgattccc   240
aagtgtcctg tctaaaagg agcagagata aatattgnat tcattcattt tctgatgta   300
taacagaatc ccacactgtt ggtgttctga gtatactgac attccttgac gctagatttt   360
atattggtag ttgcttgggt atcatctctc tctctatga gantagagga ttttctctt   420
attcacttta ttatttata tccataccac ctggatcagg ttctggcaca taataaatgc   480
tcaatggata aaaaag                                     496
```

<210> 134
<211> 197
<212> DNA
<213> Homo sapiens

<400> 134

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atggagaaac tgagacgcag gaggattaag cacttcccga ggtcacaaca gtgaatgttg    60
gagctgggat gtgaacctga gcagtctggc tgaagagtct gctgtattca ccacacagac   120
gctctacttt tctgacatcc ctcttagagc cacaagatg ccattccttg cctcaggaa   180
tgctcaaggt tcccccc                                     197
```

<210> 135
<211> 209
<212> DNA
<213> Homo sapiens

<400> 135

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gaaacaaaat ctcagactt gcttccaaag gagaagtttg aatggaagg gagaaagaga    60
```

ggaagggagg gacggcaaga aggaaagaag agagggangga agaaagcaat ggcataccca 120
 tgtttctgtg ttgtttttc ctactacaaa atattaagat attggataat aaaggagcca 180
 aatagtgtca catggctcac gtgtgtatc 209

<210> 136
 <211> 135
 <212> DNA
 <213> Homo sapiens

<400> 136
 gcttatctcc cttgtgttt cttggagatt aacctgatgt tactctgaga aggctctgta 60
 tgttgccaag tttgaactc tactgaacgg aacaaaaaat aaaagtctaa gaccaaagtt 120
 gcaaaaaaaaa aaagg 135

<210> 137
 <211> 461
 <212> DNA
 <213> Homo sapiens

<400> 137
 gtctcagttt gcttcatctc tggaatggag atggttctct atgtgatcat gaaaatttct 60
 cccagctctg aagacctttt attttgaag aatcattgtg aaggatggg cttggcaaat 120
 gaatggaaag atgagcaatg ggagaggaaa gaattgaagg gggctgtgag gttgaagaa 180
 tggcatcccc catgaagtgg cgctgaaaga tcacgatagc acagttccgt gatgtgaaat 240
 accacaagtc tgcaattttt cggctctgag agtgtcgtg ggctgagagg atggaaatct 300
 ttcagtaatt ataccagttt gtattcgtct cacatttggg accaaatata aatccgatcc 360
 actctttctc cctgtgaata ttcataaaaa accnaagtgc caatttctgg tctaatactg 420
 tatggaacca aatatgttna tgaagcctaa gtatatactg g 461

<210> 138
 <211> 279
 <212> DNA
 <213> Homo sapiens

<400> 138
 gcattaagct agaacntgag gaaagagaca ngctntggcc tgaactcaaa acttagaaga 60
 catgagacac agagaggggaa tgaagccac agagagagaa aatgaatctc aagaggagga 120
 caggactgta ataagcgaca tcatgaagtt agaattctcc agcagaagac tgaataactg 180
 taactgacag taactgacca tctggaacac tataaatgtc ttctttactt cttactttgt 240
 ttattgttt gcttgcttgc tttaaaaaaa aaaagtataa 279

<210> 139
 <211> 249
 <212> DNA
 <213> Homo sapiens

<400> 139

gngatgacct caagaggact cctgaattaa tgtctgtaca gtaacttctc agagtctggt 60
 taccagtctc ctcagctctt ccggcacatg gaccatgatg gctgccccca gatggtgcct 120
 tcagctcccc agtcaccatc actgtggtat atgctgttgg tatctacccc cgatgccttt 180
 actgggctga tgccttattc ttgcagctgc tgtgggtgct agttaataac agctcatatg 240
 tgtaccctt 249

<210> 140
 <211> 593
 <212> DNA
 <213> Homo sapiens

<400> 140

gtgttttca acgaagtgc aaattttcc tggctgattc caagaggaaa cttcaggta 60
 catatgtgag tctccccacc actagaactc ttaagtggct gctgttatgg aaggtcaggc 120
 tcataatcac tgcataataa gtccttaaca gcaatgtctg gctcttcatt aatctgtaaa 180
 ctactgatt taccgagaga tgtcttgggt tttctggcg tttttcacc tacttctcac 240
 cctgggtgcca acgcaatttc cagaaaatga aacaatgatt agtttatgct attgcatatt 300
 aagtttgggt tctctgtat ttacattgca tgtttcaaag gtgacttaa tcagctgtga 360
 gttgttatgc agttagtcag agtggaattc ccacagattt ttcccccaa tgtatcacat 420
 aacaataaga gagctagaca caccttgtgt agttttaaca agtcttcgca gtttactta 480
 attgnttcc ctccctttt acccctgagg ctcccaaagc aaatgaacca ttcaggagca 540
 taaaacaagg ggaattagtt tagacttcaa taaaacacag acctcttgc tgc 593

<210> 141
 <211> 206
 <212> DNA
 <213> Homo sapiens

<400> 141

tgaagagaat gggagatgca acatgaggtc ctggagcagg cagactttgg aagctgacaa 60
 ccttgagctt gcctttgggg tctgtgagtt tgtggagaaa gactctccat ctctgaccc 120
 ctggtgtttc ctctcctgta aaaaggggaac cgtgggtgcct ctctcgaaag ccaatttcaa 180
 gcactgaaat aaaccaatgg gcttag 206

<210> 142
 <211> 34
 <212> DNA
 <213> Homo sapiens

<400> 142

tgagccgaga ttgtgccact gcactccagc ctgg 34

<210> 143
 <211> 290
 <212> DNA
 <213> Homo sapiens

<400> 143

ccggcacacn aacaagctgc ttgggagtc agaggaagac atcggcagaa gancacacag 60
cggctggnc tcnngaggnc attgggagga gcacaccagc agaagaacac accagcngac 120
nctggnaagt cnaccgcan aacaacgna agnttggcca gggtagtgg aggacagncc 180
agccgctggg tggcccaact ccaggggaaa accaccanct tncactnca tccccgtnc 240
gtctcccca tccacttgc tgagagctnc ttccactcaa taaaacctg 290

<210> 144

<211> 189

<212> DNA

<213> Homo sapiens

<400> 144

tgatgaagaa tgatttata caatgaaaga aacaagtc atgtttcttc atccatggca 60
atattctccc tgtcttcaa gaaagattga aaangtctt cagattgtag taattgaaa 120
agttgtaaaa gattgtaaaa tagaggcata ttatcagat ttgggggaat aaatttttt 180
tgaaaaagc 189

<210> 145

<211> 570

<212> DNA

<213> Homo sapiens

<400> 145

tgaagggtca aagccaatn nagaaatnt tcaagggtc ttgtaaaaa aaagtgggaa 60
ttttgggaa acccaagtc ttcngcctt naggggggga agcatctgt tgggaagggt 120
ccttaagggt natttggat cctcantc caanagaagg gggccctggc tccaatccc 180
ccagaaaggg aaaggggaaa atgcttgcca ccaggaggna gggcccaaaa taaaggaaat 240
tcttaaggaa cangggggct tgggctcaa gtattcccc ccgggccctt ngtnaagcc 300
aattttagaa tcaaccccc cttttttt gntcccaaaa tcaacctt tttntacca 360
ccaagcctgg gtcccatc cttttcaaa aacccctngg attcaattt aaaaaantgg 420
ggggccaggc ggggccttct tgggaattct tttgggggg tccttcaat tttctggna 480
aangtctcc ccaattngt nancaantaa caaaccttc ttggaatca aaaaaaaac 540
caattnggg gaatnggcc ttttcctt 570

<210> 146

<211> 770

<212> DNA

<213> Homo sapiens

<400> 146

tccttggaag caggtngca cacacaggga aatctcaacc atttatgaaa taaacctgca 60
agcagggtt ggaccacccg gggatctct tntctccct ccaaatgcc ttgcagggtg 120
gatattctgg ggactaccat tatgccagt ggggaaggaa gcttggaag gggaagcctg 180
gtttacaaa accctcaagc ccatttaagc catccccaa gctctgttc tttttggag 240
gaaaagggaat ggacctggaa gnaaggggaa aagggtgggg tattttggag gaaaaaacc 300
aaaaagcca ttccaagcc ctttttnga aaaggcctg aagccctn aaagggtcc 360

ccccttcttc ccaagccccc ttgggcttgg accccccagg aacccttcn gttttcttt 420
 tcttctggg cattnccaaa cttccaaan gggaatttgg ggcctngnt ttccccctt 480
 tttnaacctt aattagcct aacccaactt cnangcttc aacttcgcc ttggaaaaga 540
 aaagggcaag gaagccccaa ncggccctt ccttgggggn accaaggtt tcccccttc 600
 nggctttacc cttaaagg gcaaaggncg gaaatnggaa gttctttt ttcaattcg 660
 gnaaaatggg aggcctngna attttncct cttcacntta tnggnaaca aaaccaaggg 720
 ggggccttta ancaaaaant tttaaattaa aaaatantgg cctccaaccg 770

<210> 147

<211> 449

<212> DNA

<213> Homo sapiens

<400> 147

gaacaaagat tgattctctg gcacacaggt tcagacaag caactgttgg attagagcat 60
 acaggacat atattgtcct actgccccct gtggttagta cgattgtct gactagctag 120
 ttattaatag ttgtccctt ctctaccac ttcaagccca cttaaccag ctcttccaa 180
 atgtcaaga gaagacttca gaagaaattc aaagtttca aaatgatgtt ggattgaaag 240
 ttctgatgat gttctataaa ccaagagttt gcaaactgtg gccaaatcct gctcaccctc 300
 tgattgtga tagccccaag ctaagaatgg ttttacatt ttaaagtagc tggaaaatat 360
 caaaagaaga gtaataatat tttgtgaca catgaaaatt catgaaaatt caaacttcag 420
 tgtcccgtaa ataaagctta ctgaacacag 449

<210> 148

<211> 256

<212> DNA

<213> Homo sapiens

<400> 148

gaaagtagta gatcatccaa aaaggcgatt tggatcccc atggatcgga ttgtagaaa 60
 ccggcttca aattccagag gctaattgac tccaattatg caacttcctt gggtgaaatg 120
 tcacagcaat atggaagatg cttactgaa gttattcaca cttcttaatg attaaacttt 180
 taaggaactg accttctgca aatccttcc aaagcttgaa cttcagtcca tcacattaca 240
 gcattgttac agcttc 256

<210> 149

<211> 393

<212> DNA

<213> Homo sapiens

<400> 149

ggaatctcat caaacaacca gggaggatca accaccagag aaaagaagag actgggagtc 60
 atcaccatgt cccaacaga atttcatct atccttctga ggacagtcc aagtgattac 120
 ctagaggact ttgcttcata ataagtaac cttacttct gtgcagcccc acctctcacc 180
 ttcccaaat gtctgcctcc catctctggt gtccattcat tctctcaaat gatttgctgc 240
 ccctcaaaag aattttccac gttctcatc tctccctcc cctgggaaaa agcatatata 300
 agcttctata ccaccttggg ttattgggta atcattctcc agcaattctc ccatcctgtg 360

cacatcaaat aaattctgta tgcgttttct ttt

393

<210> 150

<211> 488

<212> DNA

<213> Homo sapiens

<400> 150

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aaattagttg ataacgtctt ccaggagacc tacggccatc ctactgatat gaaccagatc 60
atacctgccc tgatgggatg ccagagaaag actgctgcaa ggtacgcgcc actcacagac 120
ctctccattt atctcactga tgcaaaggac cctgagtagg gatcctctgg aaacagaaca 180
gaggggaagaa gataccttcc ctgaagccca gatgttccag aagcctgcgc ctattcaca 240
aagtcacccc aaaaatgccc tagagtttgg agttttgaag aagcgggaag aaggcctgag 300
taagggcctg ggaaccaagt tagatcctac ttcagcatca gcacatgcca gcgatgggtgc 360
acacaggttg agagcggcct gcccgtcttt tccatggngc ccacagaccc atttaggatg 420
aaagancana aaatttttt ccntgtaccg gntntggaac caggggaaat ttatatttgg 480
ggcccttg                                     488
```

<210> 151

<211> 443

<212> DNA

<213> Homo sapiens

<400> 151

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atcctattgt ctccatcaaa ggaaaataag caaactgaag tgctagccca ccagctctgt 60
ccagtcctaa caagcaaggg ccttctcttg atgtcagaga cctcaggttg caagaaatgc 120
gaagggattc gaaggggcat gctacaacct aaatggaatt ctttaaaaaa gcactgtgca 180
gcagaaaaga caagtatagt ggctatttaa tcattctcac tatgaagtgc caattcttta 240
gagtcttatg acattcatga atgatgcagg aggcggacat gatgaatgca gagcaattcc 300
ctgcgacaga tactttcagg gaatttatgc cccctcccc aagaacaaaa gggtctctgg 360
gtcagttat catttgttct gcgagagaat ttacagtctt ttacgaact tcntttaccc 420
tactcataaa gcgcttattt tga                                     443
```

<210> 152

<211> 290

<212> DNA

<213> Homo sapiens

<400> 152

```
atttgcaag agtgggaaag tgagcattga gcatactgga aataccaaac gcagacgccc 60
tgggatgagg gtccgcttgg cgagcccagc aagagcaata aggcctgagt ggtggaagtg 120
gggtatgcaa gaacgtatca ttcttgttgc tttacctgc tgcttaataa cacgcatgta 180
ctgtctggca ggaaataaag agattacgtt tcaaaaaaaaa aagggccagn gnggccantt 240
cagttngnan ttanccaggn tgaacttgnt naaanggggg ggactaccca 290
```

<210> 153

<211> 508

<212> DNA
<213> Homo sapiens

<400> 153

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ggtagctggc acaagtttct ctggattaag gcatagaatg gtgtggatga tatgccaaaa 60
atctaggaac tctctctct ccagctggaa agaagaagca ttattacct cacagtttct 120
atgactaaag aatccgggag tggcttagct gggtagctg gatcacggtc tctcaggacg 180
ctgcaatcaa gatgttggt gaggccatgg tcattcaag gtcagtttg gggaggatcc 240
acttctaac aaaatcaca ggaacctga tggcatggta ctagtttc ccaagagcaa 300
gcaatccaag aggatgagac aaagaattta agactgaagc cacagtctt tatcattca 360
tctgttaga gttatctat cagttttgaa gtctcantgg tttagaacc agtcagtaag 420
tcaccacac tcatatgagg gataccaagg tataatgccg gacagattg tgaagcctct 480
ggagctgctt ccatggctgt atgatctg 508
```

<210> 154
<211> 81
<212> DNA
<213> Homo sapiens

<400> 154

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agacgtggg gagctctga ataaaaaan aactngtna tgggacgat ngaccanaa 60
agcagacctg ggccacaac t 81
```

<210> 155
<211> 416
<212> DNA
<213> Homo sapiens

<400> 155

```
gacgttgag gtctctggca atgaggatct tctacaatg ggtgcaaca attcctgggc 60
cttcagagg ttctggatgc aaattaagt gttctcagc tccccact gctggctgat 120
ggttgagatt tctgcatct tcagaagca aaatatgctg aaattcaaga actgggcatg 180
aatgactgtg tcactgccg gagctgagcc acctccaagc agtgagccag gccaatcatg 240
tgaggccctg ccaccttcag acagtgtct gtccccctc accaggaaca aacagaggac 300
ggcctgtcgc ctctcagtc cctgctgcc tcagacttic acatactct tatcaagtt 360
tacagagctt ttctgactct gtaacaaca gtcaataaaa aatgctggtg tcccc 416
```

<210> 156
<211> 403
<212> DNA
<213> Homo sapiens

<400> 156

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cacattgat caaataatat cagaagctct cccatctgtg atctgtctat agccttacca 60
ttagaagcct caccagagcc aggcagctgc agaagcctct tttaaaatg gtttagaatg 120
atgactggac ttggcagcaa ctgctttgg aagcaccaaa caaaaagtgc tatctggtgg 180
ttgattgat taactgcaat ctagacatcc atttgtgga ccgtattcac ataagcaagc 240
```

agctgcaatc caggcctctg ttgggggtg ctgagctgag ccaagacatt cactcttcaa 300
 caacaaaggc atgttgggag cagccaggag cagttctggc gcttgggagt gaaggaatgt 360
 tctgccta at gagtgccaga tgaataaaaa tctttgatat att 403

<210> 157
 <211> 104
 <212> DNA
 <213> Homo sapiens

<400> 157
 gngcacattn anganccaaa gncatgactg actccccgna ttccacacct cantntttaa 60
 gngganaant atctgaacta aaagctgaac tcaacaatga aaag 104

<210> 158
 <211> 636
 <212> DNA
 <213> Homo sapiens

<400> 158
 gctgcggggc accagctaaa ctctctggga agtttgcagg aggcacagat acagccttaa 60
 ccttgacgag tcttccatca gagacatttc aagatgcagt atgaaaacta aaaggctctg 120
 ctctaacaga actttctgcc cagccataac acaaagatat caagaagaaa ataacaaaat 180
 actgtcataa gaaaatgtaa cacaataaaa gatacagtac tccaaagtac cgaggatgcc 240
 aattataact taccaatata acttcaggat aaactctgac atctcctttg tgcaggagct 300
 gctattaaca tcaccaggaa gctggagacc cctctccat tgagcaagat gcaaatgttt 360
 aggggaaagg tgagaaagga ggatgtctct gcaggaaccc aagtcacat gctgtggtgt 420
 ggtcaaacca gtgactctca ccatgtaggc agccagtggc tgggggatgg ctgctgctgg 480
 tgtgatgacc cctctcata aatttaaact taaaagacca tctttgatgg tcacaagctg 540
 tgtgatctct gctcaccacc ttgtctgat catttccaa gtgagaacca cgaataatat 600
 ttcactncta tgaatcttat atncaccacc aaggat 636

<210> 159
 <211> 383
 <212> DNA
 <213> Homo sapiens

<400> 159
 aggaactcaa tttttattca gcaactgacta ctggcaagc atcattaaat gctgtatctc 60
 aatggattct ctattatag ctgtccatac tgnggagggt tacaggaaaa ttctacaaat 120
 gccacaact ggtcaaatat agctggatc attatctgca tgtttctgg tctacacaa 180
 atggcctata aaagcaaaat aagaacatta gaatgcataa tctgaactcc attaagttct 240
 ttactgtgta tatattgtt taaccacaga atcttaaaaa ctgtcttatt ttatgtatta 300
 taccatctt tctgagccct aaaggacaca aactatttta aactgttata gaataaagta 360
 taggctgaaa ctgttaatca gct 383

<210> 160
 <211> 162

<212> DNA
<213> Homo sapiens

<400> 160

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atgcaacgcc aggagcagca tcagccacgc tgtaaacaag ggggaaacgc caagcgcat 60
acagaggacg tcagccctgc catcactggg ctggggaaac aatgccagct atggctggtc 120
tccgggttca cagtataag ggaaataaac ccttattgt ct 162
```

<210> 161
<211> 276
<212> DNA
<213> Homo sapiens

<400> 161

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caggcncaca aacaagcgc tgggagtcaa gaggaagaca tcggcagaac aacacacagc 60
ggctggncat cgngaggaca ttngaggag cncaccagca gaagaacaca ccagcngaca 120
ctggnaagtc naccgnana acaacggnaa gnttggncag ggtagttgga ggacagncca 180
cccgtgggt ggcccaactn caggggaaaa ccaccantt ncnacttcat cccgttctg 240
tctcccat ccacttgc gngagctact tccact 276
```

<210> 162
<211> 284
<212> DNA
<213> Homo sapiens

<400> 162

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gtaccctaca aacatcatca gccatcagc tgtgtgccac aggaaggctg ggaagcacgg 60
ggtgtacaga aaacaagcaa ggaagagaaa aggcactgaa gcagaactgg tgaatcaaca 120
gtgcctgtta aattggcaaa tctgaaaca ctcaacaaga acctggctc cagaggggac 180
aacacaggtc ataaaacttc cagggccact gacctatta tgtgactaca aaggtttatc 240
attagtcga aaattgtgga ttaaaaataa attaatgcc atgt 284
```

<210> 163
<211> 209
<212> DNA
<213> Homo sapiens

<400> 163

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ataatgcaag ttctgaagtt ctgaatgaaa aaaattaagt gatatttact attctacagc 60
gacttgtga ggtgctaagg aaagccatgc gatgccacgc ctggcaacaa acccactg 120
cttcaacttc ctgtgaagaa agccctacca tgatcccccac ccacattatt tatttgacg 180
acccaaacaa ataagaaaaa gtagccagg 209
```

<210> 164
<211> 184
<212> DNA
<213> Homo sapiens

<400> 164

cacttggcgc tgctgacgta cagagcaagc aaagccgctg aagttcaaaa cctgcactga 60
atctatctca aacaaagaat gccaggaccc actgcagtga cccctaggat gaagacatgg 120
aatctgttat tatgcaatgt cacttaagta tgtctttat attaataaaa aagttcgtct 180
tggt 184

<210> 165

<211> 341

<212> DNA

<213> Homo sapiens

<400> 165

gaaagaacat caaggctcag ggtggtggga ctctacttcc ataagagcaa tgatccattg 60
ggtgaccagc acggattgtc ccacagcccc cgatggaaac attcagaggt gaatgccttg 120
ctcagagccc cctggccagg ctgaggaggg aaaaattctg cttccaact ctggcaagaa 180
attgtgcat ccagaggctg cagaagccca cgaggagcat gaagatgcgt gggaagaata 240
ggcgtgcct tgagtgcac cctgagccag acccttacac acacagcttt cattgttggc 300
tttgtgttt tttttttt ttaangnaaa aaaaaaatcc c 341

<210> 166

<211> 419

<212> DNA

<213> Homo sapiens

<400> 166

agtctgcat taagtcgact gaggtggata atgaagtga aggaagcaga agagagtgtt 60
atagtggaa aggtgggaaa tcacccctc catgtgaag ggaagattc aggttcaaaa 120
tgacacgttt cctcagaat gacttttgct gtagtgacca tggatatctt tctgtgttc 180
ctgaaactct gcagacagtc ctaagggatc cagtgggtcc tctgatggac ccaatgctg 240
gaagtcacgc atatatctct gaagagttgt cacaagaaat ggcgtttctg gaggatgcac 300
aggaaacttt tcatttggca tgaaaaaggc tatttgattt gcaaagactg cagaggaaga 360
agtttaaatt cttgagcccc ctaaaaaaaaa atttttaaaa aagnggcttc caacctttg 419

<210> 167

<211> 177

<212> DNA

<213> Homo sapiens

<400> 167

agaactgagc tgacatggac agaacttcca gcaggacctt gaatgttaac gcattacaga 60
tgccagaacc tctgtctacc taaggccctc agtgactttg tgaagcagag tctcacctcc 120
aggctggaaa catcctggac tattacatga acaagaaata aacttcactg tgctgct 177

<210> 168

<211> 439

<212> DNA

<213> Homo sapiens

<400> 168

```
gatatgaaca cgaagcaggc agaggatgaa gctgatgggtg tgcattggta ctgtgctcct 60
gcccattttt gagcttcttg aatacaagct gtgcctttgc ctggaatgtc cctcccagtc 120
tgactaggca tcttctgatg ggggttgacc tgggtgcttc taactactagg atggacctct 180
tggcaatctc tggatatctt tctgtggttt gttataatgg gagaagaaga agcactccca 240
tctagattgc tgtatcagaa tggactgtta tgattgcaaa tggcagaaac ctaactcaat 300
gcaactataa naatgaggga aatgtcttgg cagctcttga aatccatgga agaacaaaat 360
gatccagggtg ctggagggac agcaacagag ctggacctca ngtgctgctg gagccagagg 420
ctcaatttct actagtctt 439
```

<210> 169

<211> 393

<212> DNA

<213> Homo sapiens

<400> 169

```
ctctgncac gtncggggtc ccagagtgtg cctgctcaga tcccaaaaaa ctgcnngan 60
caggangngg tcacanagtg gttaagggga agggagaaca ggaccggcgg gtttctttac 120
cgcgggtcaa gaacccttga aagncntctt cggcttcatt taacgcaaac ttggcccaca 180
ttacttttc cccatgggag gcccgaagtc cgaaccaga tgcctctccg acgacagccg 240
caaagcgtaa ggcagggtcg tattccagcc tctaagcgct ttacagcgcc agatggctcg 300
cgcacgcgct gcgtcttagt ataggtcctt gttaatatgt agaagtgtct ttctcattga 360
tataggaaaa taaactact tgtatgtctt atg 393
```

<210> 170

<211> 227

<212> DNA

<213> Homo sapiens

<400> 170

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cacctgaac tagaangggg aangnaangt gccttgngan tcacnccggc acaacgaaaa 60
ntagttgagg cncggcgccg ggggcttcac gcttcttaat cccagcactt ttgggaaggc 120
ccgagggtgg ggaagaatt ggctttgaa gccctgaag ttccgaagaa cccagccctt 180
gaagccaagg aagtgaaga aaccgccccg tttcaaact aggggggg 227
```

<210> 171

<211> 808

<212> DNA

<213> Homo sapiens

<400> 171

```
gaccttctgg ggggagncta nctggcattt angtnacaga cctgcccctt tctttttaa 60
aaagaacaac tcaaagnat ctgggcaacc acttggtccc caaagcttct ttcttaaggg 120
aaagaagaat tggtaaaaag tgttgggtgc cctgggaccc agcaagcatt angccatcac 180
cttgggggacc caagttaaga aaatggaaga atgcttcaag gcttccatcc caagaacctt 240
gcttgggggc ttggggggcc caaccaatc ttgtgtttt aacaagggcc tcccttgtgt 300
tgactggtng atacgtggat gcttccaagg gtaaattggg cccacttgaa agaaaagtaa 360
```

aaaggaactg ttctacacct taaaagaaag ccaaagggga cctcaaatta caggccattg 420
 cggtttactt ggcattatta tcaattttaa aaaatattca aaaattaaat ggggaaaggg 480
 gaaataaaaa caccaggggt taaaaagggg atggaattta aaaaaaaaaa agaagttaa 540
 aaaaaaaaaa aaaaaaaaaa aaagggccan gcngggggcc caatttcaan tttnggaan 600
 ttaaacccan ggcnttgaaa cntttgggtc naaaaaaggg gggggggggg aacctncccc 660
 cnannnnnt catcccnenn tcacnatnt nttgnnacnt tacttgnntc ntctacattc 720
 ntganctaca acattcatet tatntantta tntatcnenn tnacnncnctn anntttttnc 780
 acttatttnc ccanncttat atatatac 808

<210> 172
 <211> 649
 <212> DNA
 <213> Homo sapiens

<400> 172

ttttaggta caagaacctt gangantttt ttggacttgg ctggncatn gggccggtgc 60
 cccttcttgg gangaaaggg cccttngnat tgggtggaatg ggtggtccaa cctttccaca 120
 aagtaccttc ngggccaaaa aggaggggggt gaccaaagtt tcaaagctca aaccaaaggt 180
 caagaaactt aaaagggggag cctgcttgac cccggggggag ctgcccac ttcttgng 240
 gggaaaaaag gggaccaaga atggaaagct tnttttcca agaaaagctt gatggaagcc 300
 aaccttggga ccagcaaaca agggggacca aacggagggt gggaccttc ccaaagaagt 360
 acttgggtgt ctctctgtgt ccttgcacgc cccattgatg ttgttaaccg aaattctttt 420
 tgaaggggc ttcccaaga taaagcaagc ccaaggggaa agaaaaatga aaaactcctc 480
 ttgatgttgg gtttgggggg ggggtcttgc caagcttggg gggccctccc ttgtcgcaa 540
 gtgggggcca cttttttt tttnncctt tgnntcttt aaaaanccn nctttggntg 600
 nctnnanca anggttnaa taaaaanaa tttttggga aaagtttt 649

<210> 173
 <211> 271
 <212> DNA
 <213> Homo sapiens

<400> 173

ttcccggag tggggatag aacagcccgt ctgggtcct gngggtggaa gccnatgtgt 60
 ggaagaatgg agggcatcgg ttagaaagga gtctaagtc ctgatgggca ctgagctgca 120
 agaaccagcc tgggtctgct ctgctggatg tcacttacta gagagcgaaa ttaaatgtgc 180
 ttcagctact gttacttgg gtttctgtc attttagct gaaataatcc taatcaatat 240
 gagatatatt aagtaaaca aaatgcaaat g 271

<210> 174
 <211> 272
 <212> DNA
 <213> Homo sapiens

<400> 174

caggaaactg gnagggaaag aaagaactgg ccaaggggga ccaaattctt ggttggaat 60
 ctggggcca ngaaaccct taanggagga ngantcctgg aanttgaaa ncttaatggt 120

tatttaataa ataaaattgg tggtttaac ttcaaatcc tgggggcat gggcaccaca 180
 caggggaaac caatttctgg gcctggaatg gcttgctca aaggctctc cctctttgg 240
 gaataaaata aatgggctt tcaggtttt tc 272

<210> 175
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 175
 gactgagctg ctggcctgc agaggaagcg ggaagcagtc agatgcaagg caccaggtt 60
 agaattcaaa tgctgcaggc accggggtct gcatgacagg acggctcagt ttacgtgta 120
 gctgaggaaa ctgaggcaaa gaggacgagg aaagctgccc acaatcacc tgctatggcc 180
 caggactgca gttcagatcc caggacttcc aggctggtgc ttttccacc acggaaaata 240
 ttaaagacta aataaactac aaacatt 267

<210> 176
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 176
 gcatgagcac caatgactaa attggggaag aggaactcaa ggggagaagg cagctcagaa 60
 tcaaagattg aagaattgta tctatcttca agttcactt ctctgtcatc tctattctgc 120
 cgttgtcca tcagggtcaa gcagcaagaa gataaacaga gaaaaaaaaa taacagttat 180
 tagccccacc ctaatgaagc caaagagttc cactgggaaa gagcaactga aagctctgcg 240
 tttgaaactc tctggactc agtctcatgt atctcccact ttggctgatg acgatctata 300
 tcctttaact gtaataaaca aaccataact gt 332

<210> 177
 <211> 908
 <212> DNA
 <213> Homo sapiens

<400> 177
 caggaaactg gcagaggggg agtctcactc ttggtcggcc agggctggga agtggcangt 60
 ggggtgtcaa taagccangc ttcanccaac aancctcttg gccttctca aaggttcaaa 120
 ggccggaatt tcttccggc aatcaagccc ttccaagggc aaaaggaatg gaaaaccac 180
 caaaggaaga aaaggccagg aaaggggcaa gaaaaggaaa ggggaccaa ccttggtta 240
 ttaaggaact tgggaatggt tttgggttgg tgcccttca aaaaaattat gttgaaagc 300
 cttaatcac caagtgttg atgaccattt gggatgtggg gggccctttt gggggaagg 360
 tggaaatggg ttgatgaag aagtaaaaag ccccgatttg aatggaaac cgaaatcctt 420
 gtccatgcc attggaagat ttatgacct tataaaaaag aagtttctt aagaagaggc 480
 catcctcatt tctccacca tgtggaaggt ttaccaaatt ggaaaagata agcttgctta 540
 tgaaccaag ggaaaacaag gatctcacc aagaacacca agatcttgta agggcaccct 600
 tggatcttg gacctccca agcttccca caaacgggtg ggaagaaaat ttctattggg 660
 ttaataaag ccaagcccag gttggatggg caattttaaa tattaagcaa gctttgggaa 720

ntaggaacaa gggacaacca aaccttaagc accaaaaagg ttttcttaag ggatgcctta 780
 cttaaaaagg ccaccgacnt ttaatgggga aagggttaag tngcctctta aaatggccat 840
 aatanttaag ttaaaaggna aagnaaaagg aatgggtgga aaaatcaaat gggatcaaga 900
 acctccaa 908

<210> 178
 <211> 274
 <212> DNA
 <213> Homo sapiens

<400> 178
 ctgccgctg ccggacacac aanngtctg tatgggggaa gtggaccagg gtentattca 60
 ancccttcc cgtttattcg gangaatgga tggcnttaag taccangnca ncnttngga 120
 gggaaactng ggcctnggg aaccaaaggt ggaaccctng aagaactggg gtggggctt 180
 ctaagaaac caagccctt acccaaactg gtacccttc cctttctt ggctcaagcc 240
 caaataaat taatattccc ttctttcaa ctcc 274

<210> 179
 <211> 526
 <212> DNA
 <213> Homo sapiens

<400> 179
 gacgtctggg gagctcctgc attaatcag actngggggc tnccttggtg gccngggctg 60
 ggnccagng acgggntnac agcacacggg cggacctacc tacacctccc ggcctcaagct 120
 atgtctctgc ctcagccttc ccagagttgg gaggcgtggg atcaagtcct agattggta 180
 ttcttgctg tgtgactctg ggcaagatac tcagattctc tgggccaccg gtttcttga 240
 tgttacaaaa gcctggttac atttctcata tcaaggagat acaaagttgc tcaaactcc 300
 tcagccacag gaactgtctt attcattct gtatccccag cgtcctgaca cacagtaggt 360
 gtcagtaaa cgttgaatgg atacaaacat gactgtgaag agccttgtaa acatcattaa 420
 ccaaataatg tctatatgta tatatgtag cacttactac aacaggccca taaaccttc 480
 caaatgaca tcaacaggaa gtaaaacctg tttggatgt acccat 526

<210> 180
 <211> 730
 <212> DNA
 <213> Homo sapiens

<400> 180
 cagcaactcg agnggagacg caagcncctc ctctggggcnc cggnaaagga atttaaagt 60
 tccgtgaaa tgccataccg ccaaggaact tcggganggt aggtttcccg ggtttcccg 120
 gcggtgggccc catttttcg gtttgggtgg ggtggttcaa gtttgggtgg ccgggttgg 180
 cttgggtcaa gtaaaccaag cccaaagaat ggcttcggg aaatcttctt gggctcttc 240
 cgtaagatt ggggccaaga agggaccgaa taaagccact tgctttcccg cagggcatt 300
 taaaaaaaa aaaaggttcc cggaagaaa gccaaaaaa aactgttcc caaggggagg 360
 gatggatgaa aaattccact tgtatctaaa aggggggtgg ggggtaagct tgatgcctc 420
 cttgtataag aagccaccc attggattct tacaagttg ggtggggaaa caagcatatt 480

gccatatatt gaagcttggg cttgtgggct ttcatctccc aaaggaaagc caagggaagt 540
 tgacttcaag tcataccaag ccaaatccgc ttgggttcaa gtttcatct caagctctct 600
 tatgggggacc aagtaaatct tgganaaaaa taaacccgaa gctccttctt ttggggggat 660
 caaataattt atttggactt tgtaagttaa acttggcacc caaataaaaa gccaaagtctt 720
 ttacccatgg 730

<210> 181
 <211> 622
 <212> DNA
 <213> Homo sapiens

<400> 181

caggaactgg cagggaatt tctaaaccgg gggaatgaac aattgggcaa tcaatccctc 60
 aatcaaacca agtacaatcg gcaagaagaa tgggtggcgg gcaatggccc ctgggaacgc 120
 cccaaccaag caagtcccaa tcccccggtt tggtcccttg ggaagaatcc ccttccaaa 180
 ggggaagcaa cccaataat ggaacggccc gcccaaaggg acttccattc ccttgcgcca 240
 gggggccaag gggggcaatt gttcacttgg ccgaaagac ctgcgctag gggggggact 300
 cctcataagc cctcaagccc ttccctcgt ttccaagggc ctctcccaa gggcttgcca 360
 atcaagcctt cttactttt tgaagcctc tgatttcca aattcccttg ctcttccca 420
 ctccattaaa agaagggcta aggggtggaag ggccgcttc taagggttg ctggggggc 480
 tcttcttgg gttaaaggga aacaagggga aagccttga ccaatctccc tccactacct 540
 ctcccttgt gcttggttac acaagtgggt cattgtttg gatgttaaaa taaaaggtc 600
 aataattctt ggcttctctt cc 622

<210> 182
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 182

cacacaggac acggtgggga tgcagcatct tggacctcat ccgcctgtgc tctaattcaa 60
 agacaaatat gtttccaac ctgccaagg ctctggcagg gaaaactcag atcccaaac 120
 tcaggctgtt ctatgcagc aataaccagc tgggtttca gcaacttga tggagccatc 180
 tgtgttccca gccacataa aaatatgcac aagaagggtg caaatcagca agtccacagc 240
 ttccagagc cccagctggg atgtgccctc ctttgggga ctaatgaaag agcccaagga 300
 agtcactgaa agctagatat agcaaatgg tagctcaaca ccagatgcaa ttatttaata 360
 ataaactcta aattgtttg ccccttaat aaaactctat attccaatat tc 412

<210> 183
 <211> 899
 <212> DNA
 <213> Homo sapiens

<400> 183

tacttcaagg ggaccccncc tncctgaaca tcnaaaaggg tnagnngaac gaagatcacc 60
 gngnacttga agacnggcgg agccggctan aagccggggt acgagcccgt acttggccgc 120
 ttcttagaat ttcttttgc ntctcttat gggggtaagg aagccgcaag cctctcttc 180

ngcccgggaa aaggatttaa agttccgtt gaaatgcat taccgccaag gactcgggag 240
 ggtaagtcc cgggttccc gccgtggcca tttcngttt ggggtgggtg ttcaagttg 300
 gtgggccggg ttgcttggt caagtaacaa gcccaaagat gcttgccggg aaatcttct 360
 tggccttctt cggtaagga ttggggggcc aaggaaggga ccgaataaaa gcacttgctt 420
 tncgcgaag gccatttta aaaaaataa aaagtttccg ggaggaaagc aaaaaactt 480
 gttccaagg ggaggggatt gaatgaaaa atnccacct tgtantctn aaaaggggtt 540
 gggggggtaa gccttgaatg ccccttcctt tgtantaaga agcccacccc atggaattc 600
 tttaccaggt ttgggnggg gaaacaagca ataatgccca ttataattga agccttgggc 660
 cttnttgggc ntttcattt tcccaaaga aagccaaggg aagtngaac ttcaaggtc 720
 antccccc canccaaateng ccttttggg ttcaagttt ttcaattc naggcntnt 780
 tctattngg gancccaagt naaatcttg ggataaaaa tnaaacccc gangccttt 840
 ttnttttgg gggggattcc aaaannant ttaattnga cctttgtaag taaacctt 899

<210> 184

<211> 324

<212> DNA

<213> Homo sapiens

<400> 184

aagacatata tgatgtctgt ctgggaccc agcaaccatc ttggaccacg tgaaaacctt 60
 ggggatggaa atcacatgct atggatggcg aagaaaacta aaagcgcctg agtcactgat 120
 accactttag agctaccata taagcctctc ttaagccttc cttttatgaa agaaatataa 180
 aattccatct tctgaattc ctatctgtgt tactagcaat tgaacaactg atttgcagc 240
 catctgaatt acccagattg tctgataatt ggtcaatacc cacttcattt taggatatag 300
 aaataaagct tcaaaactgg ccat 324

<210> 185

<211> 176

<212> DNA

<213> Homo sapiens

<400> 185

ggtcagcaga gacaaaggca atgttggtga ggccatgtac atttcatct ccttgagctg 60
 gtactgtgag caagctgttc atctctccac gccaacctca atcttctct ctaaaaaagg 120
 gactgatgct acttctctaa tctgccaatg acctttgcaa ataaaact taactg 176

<210> 186

<211> 268

<212> DNA

<213> Homo sapiens

<400> 186

gaaactttaa tacatcataa ctattcatta atgtatgcct ggcaaagatc aaatgtcaga 60
 agatttattc agccacagac actgcaaatt aactacattc atgggacaac caaagcaaga 120
 aagcctcatg ttttggggga aagtttgata tcagcaatgt ccagacaagc aagtgcataa 180
 tggaaacgaa ctctatggaa cccaactcag acaggattga cagtgaaga accaactctt 240
 taattgtgag aaattaaaac aaatctac 268

<210> 187
 <211> 221
 <212> DNA
 <213> Homo sapiens

<400> 187

```
aatctcactc tggctgctat atggagagta tactggagaa gaacaagaat ggaaggaggg    60
agccaagttc agaggtgaac aagagctgtg agaagactct gaggccttag gaaatgggaa    120
agctaccggg caaaaggatc ctggcccctg aataactgca cagctctttg ctggctgca    180
ctgggatgcg atgtaactga taaataaaca tttcttatgt t                    221
```

<210> 188
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 188

```
agttggatgc tgaacttgc agtcacacaa ggacttgaac ctagagcttt tctaaagccc    60
gtactcttcc cagtaccctg agccaggggga gccagcgggc agaaatgacg tgtgaggtac    120
cctctctctc ttacttcca tgtgatctgt tactcatttt gtcaagacat cctgggtccc    180
agagaccact ctattccca ggtgtgtgac ctctcctac agactacagt gggaaagaca    240
ccatctccag gngccaggng ctacacaaga tactggctat agcagcgaac aggacagccc    300
cgtcnattct natngngngn ccaggacaat aagaaaaaag acttttttat tttatttt    360
ttgaaacgga gttttgctnt tgtttgccca agctggaatg caanggtgtg atctcnatna    420
ctggaacctt cggttccaa gttaacaat tattctggct caagcctntt gagtagctgg    480
gattcangca cctgccccac tcccgggtaa attttgggn ttaanaaaa aaaagggttt    540
```

<210> 189
 <211> 258
 <212> DNA
 <213> Homo sapiens

<400> 189

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gcatgtctgc agaaatgatc agacgtatgg aattacaaga tctcctgctc gtttagggtg    60
ttcaaggaaa tcaaagaact gtggaacca ttactgtcca ggaacaatg ttgtctttga    120
aagcctcatc acctaagaca tgtctctgaa gtagatgaaa aagccaaccc aggcatagtg    180
gtggagccca gatgtctcac atgttttagca tgagctagaa gacactgttt aagtaaaaat    240
gactaaagcc agcctgcc                    258
```

<210> 190
 <211> 334
 <212> DNA
 <213> Homo sapiens

<400> 190

```
gacactggct cataagggat tcaatgtgc acagagcaac tgcctcctca cctccctacg    60
gattccacta caaccatcta ggaggaccac agcagcatcg tctagccttc ccttcccc    120
```

aggaccctgg gctgggggtgg aggaggaggc gccactgcag atccagtatg gtgagaggaa 180
 tctcatggct tccaccagaa tccccaaaac cacagcacat cagtttgcta gcttgcacaa 240
 aagccttcac cggatgtcta gcagggtgctg ggcctgtgcc ctggacttn ccaccctca 300
 gaccattaag tcaantaan ttctttctct ttat 334

<210> 191
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 191
 gagctgagct gggttttaca gagttaccgc gaggatttct gttgtgggaa aatacccagg 60
 aagtgactga gccagccag acgtcactgg gagacatgca gaagaaaaga tttcctnttg 120
 ggagttaccc cacaatgagt tctgggtctg gtcaaatcac ccattattca aacacattgc 180
 agccttctg tnttttagga aatcaaacag aacttcagca gtatgcagng aggccatttt 240
 aaacagngaa atcaccaacn taanncccaa ntttngaaa ncnnggcctt aatnncccn 300
 caaaagggaa ncttgttacc nggnaaaaaa ctggaancaa nanggccagn ttcccttggt 360
 ggaccccctg 370

<210> 192
 <211> 258
 <212> DNA
 <213> Homo sapiens

<400> 192
 ttacgtgtc atgagaaagt tgagtgatga gaccttgagc gggaatcatc aatgaaaggg 60
 ccaaggagat gagatggagc attgtaatca acaaaagtgc taaacaccaa gaagtgttgt 120
 cccatatttt attacacttg agaatgtctt gctattttag acgttacaag gtatggcaag 180
 acagtctgt agcagtgcta gaatgattcg ttgaaatgca ttcaatcaga aataaaagat 240
 gctgttaata actgtcac 258

<210> 193
 <211> 190
 <212> DNA
 <213> Homo sapiens

<400> 193
 gtctcatgt gcccttgagc tgtggactcc aacactgctg ttgcaaaaa gaagatggca 60
 ggaaaggatg gccctgcaaa gtgtgccatc atgagtgagc atctctgtct actcaaactc 120
 tgatttttc actgcagccg acttagtgag gaatatgggc gcactaagtt ataaaatata 180
 agaatgacag 190

<210> 194
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 194

```
agaactgagg ttatTTTtgc ctgctgttta tgtcatgaac caggagcagc aaaaacatt 60
aatcttgcac gctaactgac tgataatcac tgatgtagc tctatgctaa ggattctgag 120
accaccatgg gactggatgg aacagcatgc tgtgatctgc taatgatgtc tgctatggac 180
accacaagca tacagagtga acctgcagca cagcaagaaa acagagcacc aggctgtgac 240
ttcacagaag gccctgggag ttgcagggaa gaacagagag tcatggcaca tgaggctaca 300
ggaaaaatga ttttaaaaaa agaatgataa ttataaagca ttattgagc act 353
```

<210> 195

<211> 326

<212> DNA

<213> Homo sapiens

<400> 195

```
gtctctgect cctctctgtc aggaaggaga gagagaagtt aaccacacag aactgaccac 60
cctctttacc cagaaggagc tgatcagcca tcttaggca gaaggettcc tccagctgca 120
cccagattcc ccttctgtct cccacagcac cctgggctta cttctccaga tcatgtaaca 180
ccctgtgcta agattgntta tctcttgnct gacttcttga gtggatcata agctctttga 240
atgcaggcat tngtcttct cactcgaac atctccagtg ttgaggacag aagtgccac 300
agggcatagg atatactcaa ttaagg 326
```

<210> 196

<211> 303

<212> DNA

<213> Homo sapiens

<400> 196

```
acaacaagct ggtgagcagc ctcagcctgc ctctttgtt ccatcagaga tgctcatgtc 60
atcgggttac gcaggacaat ttttcagcc agcatccaac tcagattatt attcacaatc 120
tccttacatt gacagttttg atgaagagcc tcctttgcta gaagataagt taaggaagtg 180
ttattaatgt gtgtacagct agaagaataa tagcaataat tagcacttaa tgtgtgctgt 240
cagcctgcag tatacagtgt cttatgtttg attgtttcac atataacaag agtttgctga 300
acc 303
```

<210> 197

<211> 170

<212> DNA

<213> Homo sapiens

<400> 197

```
gtatgacaca cagcatgtct aagcaactgc ctccagcag tgattgatt tgctggttcc 60
ccacacaaaa agtttgaag agacccttat gtcttctgta gagtttcttg gttgtaagca 120
gcaagcactg gtgctggcta acttaagcaa ataaagaata tatcactcag 170
```

<210> 198

<211> 342

<212> DNA

<213> Homo sapiens

<400> 198

tgagatttat agtgctcttg gggaggctcc tggaagaagt gatatatcan gacagacata 60
ctattcaaaa gcttaanact tagcatctga ctataaacac catgccacaa agaagcttgg 120
gatgaaggat cagaggcga gaggagtcca gcgccacga caccactgg gagctacatg 180
catganaccc cacccaatca gnagaacct acngccaaca gaattatgag aaataagaag 240
ntgnngnngg tetaanccac taangcttgg gaggggnttg gtnacatcn ataggnttcc 300
ttgcttggnna ctacttcaat catttnatgt ttgagagagg cc 342

<210> 199

<211> 280

<212> DNA

<213> Homo sapiens

<400> 199

gaccagatta atgaagatca cagctgggaa cacctgtgat cacacctgtg aagaccacac 60
ctgtgattat gagagaagga aagaatctcc atggaagaag ggtttaagga ggatggggct 120
agagggggaga gaattctggg ctgattcaga gtctgtagaa gaggaaactc cccagctgtg 180
gccatgggac agaggagttc tcaatgcctc cttctagaa ctagtactaa tatggaagtg 240
gcataaacag ataacacaac agacataaaa tataaacaac 280

<210> 200

<211> 205

<212> DNA

<213> Homo sapiens

<400> 200

gtcttgttgc agtgagaatg taaagtacgt gagctatgtg ctttgtgatg aagtcgttga 60
tttatttcac ttggaacaa gncaccaca acaaagttag aatgagaagg tnattcagag 120
ggagaagaag gaaacggaac tgnctgtaga aatatacct catatgaact tanacnctgn 180
aatanatnta ggttgcaaaa acacc 205

<210> 201

<211> 261

<212> DNA

<213> Homo sapiens

<400> 201

tggaatatg aaaccagct ccttgctga agatgggaca acaccaaggc tgaactcaca 60
cttgaattca cccacaggat ggggctgagc ctgagatctc atccttcattg gcttcctctc 120
cttccttctg tticagagga atctgacctc actcacttgt tttaggttac aaacaaaata 180
aatggtgagg tcaggacctc ggattgctgt attgagcaaa taaaaataca ggactcttgc 240
attttatcta gcaataaaaa t 261

<210> 202

<211> 124

<212> DNA

<213> Homo sapiens

<400> 202

```
cagctcagcg tgctgatgca acacaggtga agagcacctt cccctcccc acctgngggc 60
tgattnccac cacgtggatc ccaaggccat cccaggaact ctttggaggg gagaagccca 120
gtgg                                     124
```

<210> 203

<211> 265

<212> DNA

<213> Homo sapiens

<400> 203

```
atgaagaaca aggccataga aagaaagcca cgagctcaaa ctgaagatgg ggcgggaatt 60
aggattcaaa tccaggtctc cggatcccca agacagcgtc tttccacaa ggccactgca 120
gccatccatc aatttagaca tgaacctgtt acctatgtgg tcacaatcat gccatataca 180
aactttagcc aagtagcact ttttctct tagtgcttc tcaactagaa tcaaattaat 240
tctcaataa agttataaat ccaac                                     265
```

<210> 204

<211> 465

<212> DNA

<213> Homo sapiens

<400> 204

```
ctttccttga agcagcatga cccatctgga tgcctcctc atctcaggaa ttttctaata 60
agctgtctaa atccagagat cgcaccacag aacaatgaat gccaaagatg agttctaaag 120
atgcgagtac ttttttcta aacggacgct gctttgtgta tggctctgct cctgggggca 180
gacgcggcag gctaagccct gcggaggagg agcaggagac agggaccag agaagtgaag 240
aggcgttgcc ttaggntgca cagcagatga cgctctcaa gatggaccct aggtgtctg 300
actcgcctc acagcttgc cccattatc atgaagatga acgctggtaa cactgctacc 360
tacgagctga gcttgccgcc attcctgggg nggacatgca tgcgtgccgc ctcacgcaat 420
gtgctnagtg cacaggaagg gagaccaaen ccccttgagg gggtt                                     465
```

<210> 205

<211> 181

<212> DNA

<213> Homo sapiens

<400> 205

```
agtgtctcc ctggttattc cagaaacacc agtcgctgag gatctctcac ctgcagttcc 60
ctgtggatc ttattctga ctggtcaacc aattgttcca gtgcattgaa gggctagcat 120
ttcatcatcg aattgctttg tacctatgtt gaaaataaaa tggatgatgtg tatgtggctg 180
t                                     181
```

<210> 206

<211> 388
<212> DNA
<213> Homo sapiens

<400> 206

```
gcaaacaagc tgagagtta agtgatttac ccttcctgaa agaggagggtc atgaacagaa    60
ttccaggatt tggacctgta caaatgccat taaggcaatt ttcagggac ttaacaaata    120
cccacctggt gatgttaaac tacctttgaa gaaagcagct gttggcccaa attgtggcct    180
acaaagaacc ccttggtatt taaggataag aaagatttgt atgagggtgga ctgactctc    240
tcccaggagg cagccatag gaaggcatgt ggcccagtga caacaataac tgacatttac    300
tgagcgttga caatgaatgc gcgtaagact tacataatct cattatctct ccaatactta    360
ggtgcatgtc taattatcac cattttgc                                     388
```

<210> 207
<211> 418
<212> DNA
<213> Homo sapiens

<400> 207

```
ttagaaatgc ccgntactta agagtancct gccnnancta caaagctgng ngnttnnaac    60
tnanngtgat ggccattgat ggtttnnntc tectgancnc aggatntgcc tgcctcagcc    120
tnncnnagtg ctgggattac aggcattgagc caccgcaccc agccaaggat tatttaagga    180
tggactcaa atccagtac aagtttcctc agaagagtga aagatgtgaa gatagaggca    240
gaaattagac taatgaatct ccaaaccaaa atataccaag gactgccagc agctagtga    300
gaaacatgga acagattctc cticagagct tccagaaaca atgaacacta ccaatacctt    360
gatttgagac ttagtcttcc agaattatga aagaataaaa ttactgctgt tctaaacc    418
```

<210> 208
<211> 450
<212> DNA
<213> Homo sapiens

<400> 208

```
gaagaactcc cccttggaag aaccatcagt gccggaagat ttctattgt gttgatccat    60
ggcaaaggag actgcagata cacaagggat attatggagc ccagacgacc tgaataaaac    120
ccttccttac tacaaggaca gctgtccctt ccctacacac tccctacagg ctgatgagag    180
acctttttg gaagcagaaa cttatacttt atgctgcctt ctctctgact gccaggatta    240
tactcttctt tccatcca gatctagcaa tgctgttgat gaggctaagt catgatgatt    300
tctttaatat ctggaacac agtagatgcc tgatatttgc tgatggactg gagaaaaact    360
gaaagtataa accacaacat ctcaagagat gtcataatg gagaagcata tggtaaaata    420
taatgaaat taaatctact ttacaagtgg                                     450
```

<210> 209
<211> 390
<212> DNA
<213> Homo sapiens

<400> 209

```
ctgaggaaac tgagacttgg agacttatgt gcaattaccc tcaagcaagt ggtgaactgg    60
attcagtcca tgcagatgtc tgggggtggga tactgagatg ctgcgttgct catgagctcc   120
caggtgatga gaagggggcct ggtccatgga ctacacgtgg agcagcagag atgtatcgac   180
ttgtccattg aagagacaca gaccaggaaa ttgatctgct gccaccccag aactgtgtca   240
tttatttatt ctgccatac gtattgggtg ttctcctgt cccaggcatt gtattgagat   300
acagtagaag actagaagac gagacaggcc tgctccctga cctggtggac tttagaccta   360
aagcaaataa attagactct tacaaagtgc                                390
```

<210> 210

<211> 253

<212> DNA

<213> Homo sapiens

<400> 210

```
gctctgggtg agtgttccag aagctgacga tgatgcagga tegtctcct cacacacaca    60
aatgccatgg caacagcaac tccgtgacaa cagcaaagaa agccagactg gaatttgcca   120
accagagtg tcgaccatct gtgaggccaa accctccaaa tgttgcccgt tctaagtgt    180
catctcaacc aggcttttgt acatagcaga ggcgacattt aagtgcata agaataaaca   240
ttgggcacat gtc                                253
```

<210> 211

<211> 247

<212> DNA

<213> Homo sapiens

<400> 211

```
gaatgttctc ctgtttgttc agccagatct gggcttagtc ttttctttt ctacacggat    60
tctaaaatca gcttgagcaa gtccatgaag aagcttcctg gagatgctga caggaattac   120
tctggatttg tggaactgga tagagatggc atctctacag cattgagtct gtgcaccaac   180
ggacatggca ttctctcct ttgattcaga acttcttalc ttcaataaaa atttcagaat   240
tttctcc                                247
```

<210> 212

<211> 173

<212> DNA

<213> Homo sapiens

<400> 212

```
attcccaggt gaagctcatg ctgctgtctt gcagaacaga ttgagtcgt aatgctctag    60
aacagagggt ctagagtacg aggaatgtac ctctcagct ccaacacaga cctactgggt   120
cagaaactct gtggatggga tccagcaatc cattccttat tgagacctcc agg         173
```

<210> 213

<211> 382

<212> DNA

<213> Homo sapiens

<400> 213

gatggggagt atgtcccca aagctgcctt ctcaaggagt tggcgcttt tggggagtct 60
tggatgcccc attcgaagac tgtggtgggt gaatcaggcg gtacccttc gccaagagcc 120
tggggaaatg ggccaggcca gggaggacgg aagaatggct ccatctcaga atgcaagtgc 180
atcctctgcc cgctccagct cctccatgtg ccctgccag atcctggcac ttctactgg 240
agaggactcg gccctgccc agggatcatgc agttatgaag gatgaggcta gaacccttg 300
cacccatctt ttcaaatta cttcagccaa agtaagcttg gtgaataagt tgcaattaa 360
ataaaggatga acaagcctgg tg 382

<210> 214

<211> 220

<212> DNA

<213> Homo sapiens

<400> 214

gactcagget tattgtgtt tatttgggg accctgctct ttgcttga aaccaagcaa 60
ccagactctt cactaaacca acaccaacag atgaagttag aaggcttgaa gctcttctc 120
agccccaggc cttctctct cttcttttt tccccccag catttggga atgtaaagt 180
gaccagatga accaaaataa attgtttac ctggcttct 220

<210> 215

<211> 146

<212> DNA

<213> Homo sapiens

<400> 215

gtcagcatca caagacgcat gaaagaggac tcacgccag ggcattggagc tgggttttg 60
atcaaaatgg aattgtctc caaatagaca tgtattcact aatctcctt ctttaaata 120
agtaaataaa acaaacacaa aatctc 146

<210> 216

<211> 268

<212> DNA

<213> Homo sapiens

<400> 216

ctatctgctg cacacgaagg tatacatcaa ttgaaccgcc aacaccctac cccaagaaga 60
gtacctggtg gaagatccaa cagtatctgg gagtaatgga gtttctcgc atggagtca 120
gaagatgaca ttgtttaaa gaagaagagt aaagcaagat aattatcagg gtagaagtgg 180
agttgctact acatggccaa gaaaagtgtg aatgtgctgc agtgattggt tgatccaag 240
ggcaacacac tcagccagac tgaaaaaa 268

<210> 217

<211> 381

<212> DNA

<213> Homo sapiens

<400> 217

```
ctcacaattg gatatactgg ttattttacc aaggctttaa ctggaatgat atatttttgg    60
atatgaccag actgctttga gcaatttagg ttgtcttcac agagcaaata aaaagcccct    120
tggaaagact ggcttggtgc ctcatctaca tggctccctt acgaggttcc tgatgatctt    180
gtgggtagtt caatacactg aatggttgta taagtgggaa aagtggcatc ccccttgtec    240
agtttctata agactacat tgaataaagg cctcaatcaa ccatccatac ctactgcaga    300
ttcttctaga tgctgatgta tgcggaaccc agaatttcta ttcttggcac ccatataagt    360
aaattttatt tgttctgcat t                                     381
```

<210> 218

<211> 298

<212> DNA

<213> Homo sapiens

<400> 218

```
ggagcccaga gggagccatc caatgccctt catgaagtca cgcatagtca gccttgact    60
gattctgcaa aagaggaaaa attaaattat gagaagaaac tggaacttcc caagaatcct    120
aagtgtgtgt ttaacattct gtaacttcca ttctattgt aaattttctg taacttttcc    180
acttcaatat ttgcttgaat attggtattt aaccaatagc atgttgaact tcaaccattt    240
cttccttaaa cttttatcct ttttatattt ccttgcata taaattaaaa ataagcag    298
```

<210> 219

<211> 128

<212> DNA

<213> Homo sapiens

<400> 219

```
ccatcctcca ataaattcaa gtttttattt tggaatgact ttccatttaa agaatttcga    60
ggatactaca aagagttcca gtatatcctt cattcatctc tccctaatgg gagagaagga    120
ttattttg                                     128
```

<210> 220

<211> 270

<212> DNA

<213> Homo sapiens

<400> 220

```
gggttacata attagcagaa gggaggagct tcaaactcctg gcactctaac acagagattg    60
ttactttaag actacacagt accacttatg aaaaaaaact ggcagaaggt gttggtggac    120
aagaacctct cctcttcatt gaagtgaaca gaccccgcca cgtggccatg agaccataga    180
gtacgagatg gaaaagagcc acataccact gtgcaagtgg tagtttgaac tctgtatgc    240
gtggcttata tacacacact actgagattt                                     270
```

<210> 221

<211> 461

<212> DNA

<213> Homo sapiens

<400> 221

```
gagctgagct gggttttaca gaggaccgc gaggatttct gttgtgggaa aatacccagg 60
aagtgactga gcccagccag acgtcactgg agacatgcag aagaaaaggc aagattgggt 120
gtgactctcc tcttctggga acattctaga aaggggtagc aaggatgctg aaaccaggcc 180
agctccataa gacctcatt tgcagaaata gagagaagta aggggtgtag gtaggaagaa 240
cagagtggta ctgagaagtc tcaaggaaga gagcgaaggg gaagagcagc atagaaagt 300
tggtgcatt tgcgtgggtg tcttactgcg tacaatgggt gagctccatg gtcctgtca 360
gcctccctca cagggggaat gccgcagatc tcttgaaaaa aaatagcttc cnttttagcc 420
tgncccgaat tccccactat tncacaaca gggagaatgc c 461
```

<210> 222

<211> 755

<212> DNA

<213> Homo sapiens

<400> 222

```
attcattcct ctgaggaccc tcaagtactt cagaagaact aaaaaatgaa tatcacgtta 60
caccaaagaa gaaatgaaag ctgccagtgt ctctgaagt taaacaggct cctgttctt 120
gaccagcaa tccaatccta gtgcatgtt tgtggacatc cccccactgc ccttcactc 180
cagaaaggaa cagcctcctg tgggttgact tggatgatc tgcctataga taatgtctc 240
aaccaccaggc tcactactca gacatctgcc ctgaggagga caggttcac cccagcacca 300
gagacatgtc tgccaaggct ttggaactg atttatccc catgcaaaaa gctagattct 360
aattctgtc gatcacaata ggttgaatca aagccctaca actgagggtc atgcaccaa 420
acaagaaata catggaaaag ttgccaagg attttagaat atcagaggct gtaaticatt 480
atagatgtgg atccttttgc ttctcttaa ggaaaaaaa tattcaattt tattaagaaa 540
aaattccac taactnggn catgttcaaa gcactccaga aaatatttg aacgccacan 600
ggttcgctc aaggaagaaa atcatcatt ttaaggngg ggggaaaagg agctggncat 660
tcatttctc tcacttacc ctaacantta taagttaaaa angggangga ttggctttg 720
nctaaactcc atggacaaaa caatttttg cctt 755
```

<210> 223

<211> 422

<212> DNA

<213> Homo sapiens

<400> 223

```
aaaaattgac agcaggggccc atgtctgtt ggttaatgc tgtaacattc caagcacaca 60
gcaaattgac ctacgtgat taattctcat gagtaagcag agatcttgac ctgtagcttc 120
ttacatctgc ctattgttt agcagaacag agaattacgg taaaacagag gcatgttaca 180
agcgtttgtg ttgctttac aaacacgtct cccaacttag tacaaaaaaa cactgcaaac 240
tcttaattt agatctctt angttgttg taaatagaaa gtagagtata atgnittata 300
gatttattc taaactatat tatgggtact ttctcgngc ttctcagata tttnagaaat 360
tgggtatgng ctggcatgaa tattggaatc ctttttntt taaanggtta aggaaaaaat 420
tt 422
```

<210> 224

<211> 207

<212> DNA

<213> Homo sapiens

<400> 224

```
agtctgaaat gattccacct ggtcttagca gaaagctggc ccggaagttg taatacatga    60
agatccaaca gccaccacgt gaccaagaga aaaaagccaa aagaatcaca gacctggcct    120
tcacattgta aaggttctta gccagggcca atagttgccg ctctctgaac ttcttatcgt    180
atgagaaaaa taatcattta ctgttgc                                     207
```

<210> 225

<211> 382

<212> DNA

<213> Homo sapiens

<400> 225

```
gtttttgcaa tcgcctgtgt gtttttctcat tcaagaaact tgagtaattg ttacaaacc    60
agaatgtcct ctgtactgag cagaagaacc ctgcagtcct tgaccagga aagcaacatg    120
tcaaataata agagcactgt ctcgagaatt agagagccag gccttggctt ccctctaacc    180
ctactggcca tgtgactttg ggcaagtcac cttccttcc tgtgcctcag ctctatcttc    240
tgtataatga gaggactgga ctaagtgaat ctctctaac cgtgacttac acacaaacac    300
acacacacag acacacacag acacaaacca cncaccccaa cncncacca ccaccttaca    360
cactttgccc atggatcttt at                                     382
```

<210> 226

<211> 482

<212> DNA

<213> Homo sapiens

<400> 226

```
ccggacctct acattgctca atatggattt acacattgac attataggaa catttgaacc    60
atctgtaata ttagcatgtt ttagagaaaa agatggctca agacaacaaa ggctatacca    120
cctactacce tgggaatgaa tgcagcagga ggtacttagc tgaggcctcc attgtcctta    180
tggcatacat ctctggagga tggccagcc acgataaatt tgcaatacag taggtctgct    240
ctggctggag cacagcagac atttctctac agtctgggc tctctgatgc gagatacctg    300
gaacaaagac ctccctaate aaatcagcct ttgcctttcc gggtaaggcc cagcatgtca    360
atcctgctaa aaagcagaaa ggaatcctga agcagaangg ttgtaatatg atganggagg    420
aaccaaagga agaagtgagg aaaagccaaa taatnccttg ggccttggca cttgactcct    480
tt                                     482
```

<210> 227

<211> 408

<212> DNA

<213> Homo sapiens

<400> 227

```
cagttccagt gccttgcggg gaatgtcttc accagtgtct taaaaggcaa caggatttct    60
tgccctgtat ccagcagctt aaggcttttg ttcaaaagg gaataagaga gaaaaatctc    120
```

tectatcatg cttttcttgc ggtactgtg cctgtttta acttttcta taaatggaat 180
cattcagtat gtacatttg tatctgttt ctttactct acagtatgt tgaaatgtt 240
ttatgttgc ttgtatatag ttttctcag atttctgaaa gtatgaccga caaataaaaa 300
ttctatatat ttagggcata ccatgtgatg tatatatata catatatatg gaggcatagg 360
ggaatgatta ccaccatcca gcttaataaa natatccacc acctcccc 408

<210> 228
<211> 399
<212> DNA
<213> Homo sapiens

<400> 228

gtcaagtcac tgagggtcag agacactgcc ttctgtcct aaagtccagt tcaggccagc 60
tctctccaga gtccaggct ttggtctcc gtctgcagat ctctttgct ttgaatgagt 120
ctgtccctga ggagggtcag gagcaacctt gagaaggaa atgatggta ctaattcagc 180
cagaacactc tcaagggtcga ttctgagcga ggctgatgcc aggtgcagaa caaacacctc 240
ttgcgcctgg gagcttctg aagtttgag aatgtgtcag atatcacctg ttgcccctg 300
ggggcctaac cccaccctg tctgcattc gtgcanacta cactnggggc ttccgttggc 360
ctccgtttg gncagcagga aacttntggc aaaagatca 399

<210> 229
<211> 283
<212> DNA
<213> Homo sapiens

<400> 229

tgaccgctgg aaagggaaca ccttgcaact tctccacga ggcttctgat cctaattgaa 60
ggagcagacc tctcccgta gaagtacatg gtggggaaaa agggccatgt ggacacatgg 120
aaacggattc gggcaggacc agaactattt ccttagccac acagatgaag ggttgtact 180
aattcctcag tgaggaggaa ctggaacccg atatcaaaa ccaatgtatg tctntatag 240
ttattgtat ataattatgt accataaact gtgcatggct tac 283

<210> 230
<211> 399
<212> DNA
<213> Homo sapiens

<400> 230

gcagtgttg tctgcaagct tcaagagcca gtgaccctga ctgccaagt atttccgaa 60
gggaattatg gtttgcatt tgatggttc caggaactgc taagagtga atcatccctg 120
aagcagtga tgccagagga aggcgagaga catatggtgg ccttacagga gaagaacatg 180
tctnagagag ctctactcc tccagtttg gccccagaat gaaacacagg aagaagacct 240
gaatttgatt tgcatttcaa agtanaactg tcccagctga catgaagact gatnaataag 300
gaataagat ttattgntgn atgtactga tttttctgn gggccaatat tntgtanaaa 360
aacctgncct tgggccnctt accattaaac ctggaagaa 399

<210> 231

<211> 60
<212> DNA
<213> Homo sapiens

<400> 231
gtggatgaag ttgggtgctt cctgtacatt gattttgctt cttcttggt caccaagaaa 60

<210> 232
<211> 321
<212> DNA
<213> Homo sapiens

<400> 232
gcagcgacct tcggcattaa attactcccc agaactcccc agcaaagcaa caaaaccatc 60
aaatatggct gagccgataa tgcgccattg tggccagcc tgggcaataa gagcgaaact 120
ccgtctcaaa taaataaata aataaatagg aacagtgatc actaattaca aaattgaata 180
tcgaacccaa aaggcatatg tgtccaccgg aagaatctt ctgaatatat caggtttgat 240
tccatgtaat cccacaccag cccaactacc cacatccaga cccacatcca gaacgttata 300
atctgataag tgcgacaaaa c 321

<210> 233
<211> 240
<212> DNA
<213> Homo sapiens

<400> 233
aagcacctga gactgcagag agtgccatgc aacaggaaga tcagtcaacc acagagcacc 60
aactatcact tgcccggaaa acatctaccc tcaacactgc ccagggaaca tctaccttct 120
tctggtaac catttacaat ctctccaac ctccaacctc cataccctct ctttaccctc 180
ttctctcaat atagcctcac ccttgtatg tcatgaagga aataaacccc cttatacaag 240

<210> 234
<211> 600
<212> DNA
<213> Homo sapiens

<400> 234
gcagcacctt acaagaaaag ccagaaaaga aaacccgtgt gtattgtaag agtttaaaga 60
gacagccact ccaaaagaaa atggacattc acattgacgc ctggaaaaga accaggagtc 120
accatgcaaa tgtgtcatag cagcgagaag tctgtgaaa gcgaaggaga tcagccaggc 180
tcccgtgagt cagggttcag gattcagatc ttatcttcc taagacactg atctcactgg 240
tccagttat tctgaaacg ctgtccctcc tccgtttcc ctgaaattta tcaattaaag 300
taccgntct tgttaaggt aaaaagatta agaagttga tgagacagag ttacaacag 360
ctaaaaaaga agcttaatgg gatgggagtg gttcacagat ggtgcaaatt gtctgctaag 420
tggcacttta tggatgggca gaatccatga gagttttatc ttgaatttct atcaggctgn 480
attcagcana aactgggtcc ctggaaattg gcattttaa aaaaatctct gncgggggnc 540
tatctttcct gggatatacca atggcagntt cgacccattc nagctgggtt cttgaacaag 600

<210> 235
<211> 202
<212> DNA
<213> Homo sapiens

<400> 235
gggaaatttg gacacagaga cagacatgcg cacaggaaga atgtcacgtg aagatgaaag 60
cagacatcag ggggatgctg gctgcttaca agccatggaa tgccgaagat agtgagccga 120
caccaggagc taggagagaa gcctagaact gacgctcct cacggcctca aaggatccaa 180
atctgctgac acctgatttg 202

<210> 236
<211> 427
<212> DNA
<213> Homo sapiens

<400> 236
cacatgctta cccagaccct gatacgatcc tggaccaggc agaagcagcg tccttctcct 60
ggaggagctt ggagcagcag caggaggcag gcattacacc ccgataagca tgcagagttc 120
tgaagaggaa gctcgagcc tcactcactc caggettttc ctctggacct gagctctgat 180
accactgca ttgtcagaac cagagcaaat ctggaggcca gagagcaaga ccagcaaagc 240
caggatctct ggggtaatta ggcccgctt gccacacagg gtccacagg tggctctcagc 300
tcccagcaat gaccaggga gaagcccacg ggaaccctca gctgcaacca atcctccaga 360
ctgctggcct gcctgccttc ctgaaatagt ccagatttca cttattaaac atattaatct 420
gaaagt 427

<210> 237
<211> 248
<212> DNA
<213> Homo sapiens

<400> 237
gtcagagaga canggaacca ggaggccacg actggaaagt ccaggcagaa gagaactgtg 60
gagccagccc agggaaggac agaagtggaa aagtcaccac agacaggaac aagcttctg 120
gcacacgact tncctgcaa acaactcaac ttagtcaaa aggaaagaga ttgtctagt 180
cctataccag gacaaggagg agattccaag gtgtccaaa cttactgat tgtgccctg 240
ttcagtta 248

<210> 238
<211> 401
<212> DNA
<213> Homo sapiens

<400> 238
gtgtgaactt gtatccagg ctggccagtt aggatcttcc attccatccc caccaccatg 60
actggttcag gaacaggga tgagattcga tctgaaacc cacattgaca ctactggga 120
agataaattc cctcccccac caccattga agagactaat ctggagctgc cagtggccac 180

catgtggaaa aagcccacac aagaatgaca ccaacacaga gggagagcca gcctgagagg 240
gagggagaag aagaagaaga gacccgatgg catcttttca gctccgggac ccaggtgtac 300
tccaccact cgactttctg gatagaaaag ccaataaaca ccttctaag ctcatgccag 360
ttggactgtt tttaattaa aataatccta acacaccctt t 401

<210> 239
<211> 490
<212> DNA
<213> Homo sapiens

<400> 239
acggagtctc actatgttgc ccaggctggc ctgaactcc tgggtcaag cgattgatcc 60
acctctgctt cctgagtagc tgaaactaca ggtaacttgc atctcattaa ttggaccata 120
agaccaagca gccagacctc agttttatcc gggtaaaaa tctggcagct cactggggac 180
agagctgccc tcagcagcta gaggcttctg acctgacggt cttaggaga ctcccagcag 240
ctgctaggta cagtttctcc tgaggacgt tctgagaact ttccctgggc aaaaggacca 300
cccatccctt tgctactggg gtagaanagg ggctaggaca ctgaaggggt gagtaaaact 360
ggatcataag cagggagtct attgcttctt taccaggggc ttgcaaagc cattcctttt 420
tggtancctt ttaaggagac aannngggt tntttgann ttttncctn gcatatngct 480
tggaaaaata 490

<210> 240
<211> 330
<212> DNA
<213> Homo sapiens

<400> 240
ggagcaagcc tgtcaaccan nagcatacga aaccggaggt ctgccttat cagcccttct 60
gcatgggaaa gctgcctcag caggctctg tctgtgaatg cctaactctt cccaattctg 120
aggtcagaac cagcancccc attggctaag agaactgaag ctatactctc caacttagct 180
tatccggtta aaagataaaa ggatgatatt ttgantnctg taannaaaaan gncggaatag 240
gccttgaagg ctcnanttga nccgggncca aanagctnga anngggggan ctgnnagagn 300
ancacatga gacggggaaa gggggatgga 330

<210> 241
<211> 139
<212> DNA
<213> Homo sapiens

<400> 241
aatgaaagt gaagaccgat gaatcatgcc ttctgatcaa gacccatgtt ggagattgtt 60
gccctgacct tgggaaagtc tgtgtccatg taaattcaga tcttaatgaa acaaaaataa 120
atgtaaagca ttttctggg 139

<210> 242
<211> 457
<212> DNA

<213> Homo sapiens

<400> 242

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ctgaggccaa agccccctcc ccagagcaga cccctagcac tccacagcag gatcacaagc   60
tggctctcgg tcccagaccc tgcggatcct tgtegcagct tccagtctcg atcacttccc   120
gatggtttga atgtgaagtc aacaatccac ggaacaattt gcacttactg ttctagggc   180
tttgcagttt aaaagtgtct tcagtttccc cgatcttctt gcaggtgccc ctgcagtcag   240
aagctgagtc tgctccttct cccagcagca gctgggtaca ggatctaaca tcagtctctg   300
cctgtctggc agaagccaca gctgcaacgt gctttcaaga aaaatgggcc aggcccaaag   360
gagctccccg tcaagtgtct ttcagtgttc ccagcacaaa gataaaatta cacttcata   420
ggagtacaca aactaaaaat aaaatttaaa gaaagcg                               457
```

<210> 243

<211> 420

<212> DNA

<213> Homo sapiens

<400> 243

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gacgtctggt tgctcctgcn ttaagtcctt ctgagatcaa ctgtcacttt tcccactgc   60
tttgtaactc atgaagctgg ccttcacgga ctgccccaac cagcctctcc agctctctgg   120
ttccaggtta tctcttgga tacctggaaa tatacaatag gaaacaccat catgagatag   180
gaaaacagga gaagagagag atgaaganaa caggaaggaa acagattgag acctctggaa   240
acagatattg agacagagtt gcatgcagaa gatttattgc ggagcacgct tgggggatac   300
acctataagg aacttgatga angcaaatg gacacagaga gaggtctgact cgtgatacag   360
ctgcatccag gacatcagct gatcttatat ggagatagaa taaaccttca cagttgtctc   420
```

<210> 244

<211> 463

<212> DNA

<213> Homo sapiens

<400> 244

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gtgcttcttg actgggaagg agtgggaagag gtcctaggtg cagaagggta tggaagataa   60
ggtaaagga tgtgctggtg ggaatgggag acaactgaga aggtgagaca agctggagga   120
aatgtcagga gctgctgaga gaagctcagc ctgaccagag atgagaattg ccatcttgaa   180
tcgtcaggaa gtgaaggaaa gccaggtga atgccacca atcaaaaaga aaaaacaaat   240
gcagatggta aggtagagaa ggctctgaag cccaggtaat gagagccatg ttaccctgga   300
cagaagcatc caacaccaca catctccaag gatgttgag atccagcatc tggatccagc   360
taactctgc atctcttct gtcttcaaaa agtaacattg gccgtccttg cntttgntgg   420
acaacacccc ctaaaacgag tgnntttgta cgtttcaca cac                               463
```

<210> 245

<211> 317

<212> DNA

<213> Homo sapiens

<400> 245

tttcaggggt aatcttgtga caaaccaggc atggagagct agctgtgaaa ttccagagat 60
gatctcaagg taattagtct acagcccagc cactgctgag atgacaccag cacacgtcc 120
aggtggacca tgactcaaga cggccaccag aacaaggcat accgacctta cactcagcac 180
catgccccga tgcctccctc tccaagtcc tctttaagc ccctctcccc agcctaaagt 240
ttgaaatgtt tcttgtaagg aatgagcctg gccattccc caaccgctgg cttttggaat 300
aaagtcactt tccttt 317

<210> 246
<211> 320
<212> DNA
<213> Homo sapiens

<400> 246
gctcctgtga tcagctgagt gctcgtaat tcccacgttc actaaacat catagttctg 60
ctgattctca gcttagagg gaaactctac agtgaacttt ttcaattagc agtcatcaat 120
tactggtcag aatacattat aattgtgaaa attatgctcc attaactca ttaaattgtc 180
ctaaacctgt aacttgtcat agttcgatac ataggttggc tatatttaac ttccctgat 240
cttatttgcc atttttgca aaagcatcat ctaaaatgta gagagagttg tcagtaattt 300
tggttttta ataaacattg 320

<210> 247
<211> 218
<212> DNA
<213> Homo sapiens

<400> 247
gtctcacaga actctcttct cttcagaatc catcatcttc cctgactaag aattcactgt 60
atggagagca ctaggagttg taagagctcc aagcctaaca taagagacat tcatccagct 120
ttagatacc acaatctatt catctgtgcc tacttacagc caaatatcag aattacatgg 180
aaatgttagg ctacagaacca taaagactgt cagaagag 218

<210> 248
<211> 546
<212> DNA
<213> Homo sapiens

<400> 248
ataatgaaat aaagctcaaa gaggtcagt ttccaagatt acacaaccag aaatgacaga 60
agatgggtcc ctctgggatt cacgtcctc tgctgggagt ttacaccat tcgcatgtc 120
aacatgaagc aacagctggg ttgaagagag ccgataaaaa tagcagcatc gcactgcaag 180
caagccgcat agaaaagaag gggagtcacc gtacttaatg cagggtggca ttgattctt 240
gtctcccgag tccagtgtg tatttctcg accatctact ttccagaaa gagcaaagt 300
agctgcttgt ccatatgagg aaagagacgc taagagaaat tgaggaactt tgctgacctg 360
atgtaactag atgggactag aaaccttggc tcgcggaacca cagagttgac attacagcca 420
ttacatgag ttgcatitg tcactgaac ctctggatt tctatcatgt cacttgctgc 480
gtctcttgn atttgtgga attaaaatta aattggggag gttttattg acttctttc 540
tttgag 546

<210> 249
 <211> 427
 <212> DNA
 <213> Homo sapiens

<400> 249
 agagacagag tcaagcatct gctagcgtcc ttggacaaga atgcatgtgt ggacacagag 60
 acaccagacg ccaatacctg gaggaaaact cacagcctct gaccagaagt gaactagcaa 120
 caatggtaca gttaaaggat cgccttgcc actcggtcc ttatacaaaa agccaaacct 180
 ctttgctaa agcagagact gttacatctc agcctcaagc tggcaaatcc tgctttggat 240
 cccggcagag gaaattcagc cgttcattag ccttaacaag ctgctgtcac taagcgaaga 300
 aattacacga gcagnacac acccggggct tttaanagcc ntcccccaa gggcaagcgg 360
 gtttctcag gacggactgt acaagttcac acttctatg tgcaaatccg gactgtcttc 420
 ttgggct 427

<210> 250
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 250
 aacatgagct caggagggct gggatttggc ctgccttgtt ccctgcagta ctgccagaac 60
 tagcattgca cctggaacat ggaagggccc aggacacagt ggccgtggga caagagcatg 120
 aagccccaga gcctcaagca cagatgtacc tctcctgggg caggggggtt cactctgccc 180
 cacagcggga ggctacagcc tggccatctt ggggaaaccc aaagggaaca catggacaga 240
 tcagcatcca cntnnaaaag tgccaatgac ttcaagctgg aatccacca caggctggtc 300
 gncctggct ggccaggaaa aggctttatn accatgccac aaaagcttc aangggcttt 360
 ttgganttt naanccccct ggctaaggt ttgaaaagg cangggcccc ccaaagncc 420
 tttttttg gggggatttt ttaccctatc nnattttaaa ctcaanaaa aaatttttaa 480
 gcctncccn gggaattcat ctttaanna ttgggtcgg ttttttaac 530

<210> 251
 <211> 279
 <212> DNA
 <213> Homo sapiens

<400> 251
 caccataaa attcaatgga ccaccatccg gacaaaagga taaaacaga acacatcaag 60
 ataatgaatt ttctcaaac tactgaggta caatgaaaaa tggaaatatt attcagaaa 120
 ttacaacaga gggatgaaga tatagcatat gctgtaccta aaagatacat caaatgggac 180
 attgggaata tggattgatg aaatttaatt tgcgattgnc ctataatgcc ttttcattac 240
 agtaccacac aaattgaggc aataaatgta tatttgatc 279

<210> 252
 <211> 296
 <212> DNA
 <213> Homo sapiens

<400> 252

gatgagaacc tggtgttta aaaacatgga atcagtggag tcctgaatag cagcacatga 60
cttgcaacaa ctttcaacat ctcataaaat ggctgtcag cattcacttt ccatctcaga 120
gtcacttctt tggaactgct agggagtcga ggggtacattt gagtccctggc agctcatgtc 180
ctgctctgtg gcagctcttc ccactgtcga taggagtcce ataccactt ctcaaccatg 240
tccggctgag cattacaaat caccttctgt ttaaaataaa ataaaataaa aatctg 296

<210> 253

<211> 548

<212> DNA

<213> Homo sapiens

<400> 253

gatgaagaaa acgcagatca ctctaagaat gacaggttcc ctgggtgctg tgaagcatac 60
ctaaacagat agctgcaaag aaggatcttt tctctatttc aagacatgaa cactgcccc 120
tccccactcc tgggtatttg taccctaaac aaaattgggt attgcctga tataacctga 180
aaaagggtgg gcttatact ttacatagtg atttatagtt tacaggctgc ttttacgatg 240
gtctcattta gttttccaaa atcaagctgn gatataagt ctattattcc cttttttaa 300
aaggggaaat gggggacatg tganggtaaa gtgagtgggt caagggtaca cgactagtca 360
gcagcagaac caggactaga attgcaagcc cagtgttctt ganggtgag cccaagaaa 420
ctctgtccag ggctttgcat catggggatt tggcccaccc nccntaagca nccgagggat 480
ggantgcaaa aacactggcc tttttcttt gtcccaancc tgcctnttgg gaagtcagg 540
accaaaaa 548

<210> 254

<211> 219

<212> DNA

<213> Homo sapiens

<400> 254

caggtaaaca accaccacag atgcaggaat ctgacagatt atgaatctgc tgctaatact 60
gctgacttca gtcccaggct actctgccat gatacagaaa tatgccaaagt ctgctccagg 120
aagctgctga atcaggaate cacctaccac attgggcagt cactgctagc tgccacctcg 180
gccttgatcc tcgccagcaa aatatatgcc tcaaacttg 219

<210> 255

<211> 374

<212> DNA

<213> Homo sapiens

<400> 255

atgggggatt cggtatgttg aatcatgagg ctttgttta agagttgctt aagatgttct 60
tcagatcctg aattccagca gaacagctga catccacaac cagtttgagg atccccacag 120
aagagctgaa tcaacatgag aatgcagttt ctctatctct ccagtcctatg acttcacct 180
gcaatcccca cagaagagct gaatcaacat gagaatgcag ttcttcctc tcctcagtc 240
atgacttcac cctgcaatcc ccacacctca gccactcca aacccttac aaactctca 300
gggaggcaaa tctgagggtt ctttccatct cttgttcag atgccctatg attattaaac 360

cctttctctg ctgc

374

<210> 256

<211> 199

<212> DNA

<213> Homo sapiens

<400> 256

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gtcatgcgtt taaaaagaag agggcattct ctgcctgcct gctgcttga cagtgaact 60
gactgttggc catctcagac tgcaaatgag ggcaatacta tacgaggacc aaatgacaat 120
gaaggaatcg ggatccctgg atgacttcat ggaacaaagt catcgtatct ttcttggaat 180
gccagcttcc aatgggtgc                               199
```

<210> 257

<211> 463

<212> DNA

<213> Homo sapiens

<400> 257

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gaaggtcaag ttnnaagccc cgatggattt gatgcagccc ttgtgcttg nangatggga 60
gggggttcat gttgcaagga cgtgggtgat ctcccagcta acaccagcaa ggaaaccagg 120
actgcagtct cacaaccaa aagaattgaa ttctgccaac aacaagaatg agcttggaag 180
tggatttcc ccaaagtct ccagaggact ttgccccctg agcagcgaag ccagccatgc 240
tgtgcagaac ttccgaccta cagaactctg tgctaacaaa tgagtgtgtg tttaggctgc 300
taaagttgn ggnaggttgg tacacagcca ttcaaaaatt aatgtanagg ggggaaaaga 360
aacaggagga gtcanataa gcttctccca ccaccacaag ctgcatttaa agtggatagc 420
atcagcttca ggtagaaatn caaggaangt gtgtttgtc aac                               463
```

<210> 258

<211> 34

<212> DNA

<213> Homo sapiens

<400> 258

```
tgagccgaga ttgtgccact gcactccagc ctgg                               34
```

<210> 259

<211> 149

<212> DNA

<213> Homo sapiens

<400> 259

```
actaangaaa anctntatga ggatacanen agagggcagc caactacatt cctggaagac 60
anccctgaaa ccaacactga tggcacctag atcttaactt ctggcatntg gaactgtgaa 120
aaaataaatt nccattgttt aagccatgc                               149
```

<210> 260

<211> 440
 <212> DNA
 <213> Homo sapiens

<400> 260

```

ggaggaaaaa aatgagcaga aactgctaac atctggaggc tgctgtccag ttacgtaat   60
ctcttgctgc agaggaggaa cacgggatcc ccagccagat ggtccgtggg tgacttcaca  120
gcacatgtgc tacctccaag acaggggtct ctgaggaaca aggaccttcc agagtgatgc  180
ttttccctag tggcagcctt ggccagggca acagacatct gcacaaacgc aggggtgtga  240
agcagctggt ctgagatgca gtgcctgaga atctgggata cacaatgtga acttcccaac  300
aaccctgca cctgccactt tcttgatct ttccactaag caccagaaga cacatgcntt  360
ttaaatacaa ggaatgtgag ttggaattc agcttctgcc attcactgac aacatggcct  420
tgaacccttc ataaactcta
                                     440
  
```

<210> 261
 <211> 253
 <212> DNA
 <213> Homo sapiens

<400> 261

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caganactga ggacctcact ctgtcaccca ggctggagtg cagtgggtgc aatcttggat   60
cactgccacc tctgcctcca ggctaaagt atcttccac cttancctta caaggagca  120
gggantacag gaatctggca tcttcttta acttcaggg aaccatgggg ggaaactacc  180
catnggcttt ggtaaagcca ccaagtggc attcctttt aaataaaaaa ccttggttaa  240
aaccaaaacc ttt
                                     253
  
```

<210> 262
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 262

```

ggagtgggaag aaagcagaca agatggggat tgcccagctc tgtgaacgtg ttggatgggt   60
gcgtctatcc cgagtacaac agaattctgaa ctgagggcag tgtgatgtac tccagaatct  120
accttctgat ggtcatgggc tcaggatggg ccttggagga gatctgcaca ggaagcacia  180
agctctggtt accactggaa gccgtcttgc ccccataaac cagccttagg atgccactga  240
tgctgtatgg cagaatggag taacagagag aatttgcaga ataaagaagg gacaatgcag  300
tcaccaggtc agcataagg gaaggcttgg ctgcatcctc tgccactctg ctgctgctga  360
ctctgccagt ggggacagca catgttcct tctacgttg cctgaggntc gtaactcaa  420
aaccacacia cnntttttg aaggagtaaa a
                                     451
  
```

<210> 263
 <211> 210
 <212> DNA
 <213> Homo sapiens

<400> 263

atgaaaaaca gaagcaacaa tatgaatcaa ggcattctca ccattcccaa gcttggaggg 60
aaggatcctg tggcaggcaa atggaggaca tcaggagata aggcaaggtc cctgccatca 120
aggacctgac agccggctat gtgattctgg gcaagtcact aagcttgttt ttacaactgc 180
aaattgagat aataaaatta tctcccttgg 210

<210> 264
<211> 324
<212> DNA
<213> Homo sapiens

<400> 264

ggtgagacaa cgataagtaa gcaaccacga cacaggaaga gacttgtcgg ggagtggaag 60
tgctcccagg agcatcaact tcgcctgtgg gctgggaaag tgtgactgt cccagacaga 120
cagaccagga tctggtgatg tcccaggag ccaggcacga aggatcaaac agtgaaactt 180
aagagtttga gcggccttgc ctctggatc ttgtcttgc cttagaatt gtaattatag 240
gatgtgtgtg attttttcc cacttaacat gtcgtgaata tttccatgt ctatgtaac 300
ctttaaagc tatttacaat gatt 324

<210> 265
<211> 82
<212> DNA
<213> Homo sapiens

<400> 265

acgggagtct nactatgntg nccagcctgg nccgaaccc ctgnccttag gantnttaa 60
angnaaatag cccaatcat tt 82

<210> 266
<211> 245
<212> DNA
<213> Homo sapiens

<400> 266

aaaacctggc ccatacagag cttacaccta tgacctggc ttcgtgggca ccatgatctc 60
agcaatgcat ctatcatgcc tgccttggga cctaagagt atgaaccaca ttacatcaga 120
gaagagtgcc aggttcaaca attaataatt tagagttaca actacatgtg aacctatgta 180
cttgcathtt cagcaatatt gcagcatagt attattatc tctaaaataa aaaatgcatg 240
aatat 245

<210> 267
<211> 455
<212> DNA
<213> Homo sapiens

<400> 267

ntgctattgn ctnaatcgnn ggaaaatncn ngganngaag cgctagnnna ccttctcngn 60
ccnntnccaa caagcccggt cctnctctg ntgncatgan acctcgaggt ngcaaggaaa 120

tgctaagga ttcgagggg catgctactt acctacatgg aattggcttc nnaattcact 180
 gggcaacnta ctgagactac cgtnnaggct attaatcat cttcactatg aanngccaat 240
 tctttanagt nttatgacat tcatgaatga ngcggggggc ggncatgatg aatgcagagc 300
 aattccctgc gacagatact ttcagggaat ttatgcccc tccccaaga acaaaagggc 360
 tcttggtctc agttatcatt tgnctgcga gagaaattac agtctttca gcaactnct 420
 ttaccctact caataaaaag cgcttattt tgaaa 455

<210> 268
 <211> 182
 <212> DNA
 <213> Homo sapiens

<400> 268
 agtgaagaga ttctgactt cctgtcctt tccctgctat attacatata tctgctaaa 60
 ctctggaaaa cagtaccagt caaagtgggtg ctgaaacctt ccttaagac aaactaaaac 120
 gatgttaaaa aggttacag accttactat ttcaagtact ggtataaac cactttctt 180
 gc 182

<210> 269
 <211> 502
 <212> DNA
 <213> Homo sapiens

<400> 269
 gcagactcaa cttcttagag ttcagcaca ttgagccctg ttgtctcat ccatctttt 60
 actgaccttc caaaggtgga ctggatggag aacccagct gtccatttg tttgaaatcc 120
 ctttaagtag ggactcggct agaggtgttc ttctgcctga tcccagatg aaaaggacgg 180
 gaggggagtg acagaggagt cttcagccag ctgccatc cccatgccgg accatggaac 240
 ctgacttcca gcgactgta gcagagaggt agctagagag cagaaagtag agatttggt 300
 ctctagggga tcttgagag aactttgtta ttacagctt tgagatatct tcttctctt 360
 cataaggatg agaccaggg ttctctgata gggcactgcc ctttaaatg gactttggga 420
 ataattggc ccactgggtt ttttgaaaa agaataaagg ttgggggggtg ggaacctaaa 480
 gccctacccc ctgggggaat tg 502

<210> 270
 <211> 186
 <212> DNA
 <213> Homo sapiens

<400> 270
 aaaatgagca acttgaaagc agaaactata atcactgtga atttcccat tgacctgcct 60
 tgctcttgca caattttat gaattttct atttccctca aaacctgta aaaggactct 120
 tcacacagca gaattacaac gacttgctg ttcaatgaat aaatcagctc atctttatct 180
 tctaag 186

<210> 271
 <211> 386

<212> DNA

<213> Homo sapiens

<400> 271

```
gcattatcaa ctgatgtccc acaatggagg atgaagattt actttctctc tcatcaataa   60
aaatgtcggg taatttttgt gggtagcga ttcagggttg aaaattaaag gcaatattcc  120
actgtattct ggtttccaat gtcgggtgta agaaatccaa agccactgat acagatataa  180
gaaaaagatt tgagtctttc tacatcaagc agaacatcct tggaatttct agcctggatt  240
tccaatgcca acagaatgtt cagaaggcat tcaggccagt gaagttacca acacaacaaa  300
gatgaacgct ttcaaaaaaa gaattgcatt atttgctaata aactgatact tagcagcaaa  360
ataaaaacca taaaataaag aggctg                               386
```

<210> 272

<211> 482

<212> DNA

<213> Homo sapiens

<400> 272

```
atctataaac taagaataat ctggagaggt caattcctaa ttagaaccta gtatggaaga   60
ctaggatcct aaaactcagt ggtaactccg aagagtaaaa atctaccca gagctatacg  120
tgaaagattg gaattttaca gggaggtttg cattttaaaa ctggttgctg agatttcacc  180
agaactacca cagaaacata ccaggaaagc tgagagaatc cacagatcct tgaaggaag  240
tggttgcctg ttgcaggctc cttgagacag ccaaaaactg acctccagta caatttcag  300
gagaagtggc aagaatggac atccacctcc caccatgtga tgacatggaa ttttggcca  360
ggtacggttg ttcaaaccta taatcccaac actttgggag gctgaggcag gaaaactgnt  420
tgagcccnan aagtttgaaa acagcctggg aaacatgcaa aacattaaaa ctgagatcc  480
aa                               482
```

<210> 273

<211> 479

<212> DNA

<213> Homo sapiens

<400> 273

```
gccaatccta acccagatca aagatcctgg gacagctgga acaggcatgg cctaattgaa   60
ctcccaagtg gacagggcca agcatggacg gacagagctt ctgaaacagt cctcagacct  120
cgtgcactctg gatctttctg taggaaccac ccatcagcag tgccagacag aaccaagcac  180
atgcactgat ccaccgcacg atgggagctg gtgtgggtga gcttgtttgc ttagccatg  240
cccacagaca ggaacagaag agcacagtgg aggccaccag cctctcgcgc tgctatttca  300
aaaggggttg cagcaggggt ggaaagcggg tccactgtg gttgccccct tctctctgc  360
ggcacacaca gacctgaaaa taaccagaga gggactgtga gctgccagcc taaaacaagg  420
aagnttgcan aaagtcttag gctcagatag gagagttaa aagaatgttg aaaccgaga  479
```

<210> 274

<211> 490

<212> DNA

<213> Homo sapiens

<400> 274

```
cccccgttgc cactgaaggc tgcatttgag agatgcccaa ctgactgaga cgagaacaga   60
ggtgetaccc tggaacctgg ccacaaggaa gccctgatgt gttacagtg tgagcttgcc   120
cacaactca aattcatcac catcatgctc taacatcgaa gtccacacgt gcctcacata   180
aggaagcaca atttaaactg cataatagcc aatgatcatt aatgtttact gagctctttt   240
aaagcagaag gaactatggt aattgcttcc catgcactac aactagtta atcctcacag   300
ccaccacccc tcatgttaga tactattatc attcctatct catacacgaa gaagctgagc   360
ttcagaagtg gtttaagtaac ttgctagaga ccaaactgta aggagtaaaa ctgaagccta   420
tgggcctatg actcctaagt caagactcag agccactctg cttatgtctc tcataaata   480
tatttcatgg                                     490
```

<210> 275

<211> 344

<212> DNA

<213> Homo sapiens

<400> 275

```
gacaagccac gccaaggcca aagctgaggc agcggaacag gccgccctgg ctgccaacca   60
ggagtccaac attgctcgca ctttgccag ggagctggct cgggacttct accagccagg   120
tccggaatat cagaagccca tggaagccca gggagatgtc cctggggcag acactaaggc   180
aggtgttgaa gacaagctgc ttgtcaagaa gcatttccc gcaagagagg ggcaagtctg   240
gggtccaac tgggtacagc ctgggtgcag ttataagccc ctttggtta cttggtagaa   300
gatggctact tggatgtacc tacttaaag atgttttgta ccac                       344
```

<210> 276

<211> 29

<212> DNA

<213> Homo sapiens

<400> 276

```
ggctgancac agtgagtcac gcctgtaat                                     29
```

<210> 277

<211> 470

<212> DNA

<213> Homo sapiens

<400> 277

```
gagaaatacc atattatccc cattttgcag atgaggagac agaagtggag agaggtgaag   60
tgacttgctc aacatcacac agttgccttc ccacgtgtgt gagaccattg ctgtggaaag   120
aagccggggc tgacttcagg gatctggtgt gaaatgactg gacctatgct ttctgagtaa   180
acaagagagc ccttctggc ttctccggga ggaaccaaatt ggcttcagca ttcagctcca   240
aagcccgatg gagaccaaga gtgatacact gtactcatga tcaactgctc agttctggtt   300
tgggcctctg agggctgatg gggtttgga gaacctccag cacaatgttg aatggaaatg   360
gtgatagtgg gcattctgtc ttgtaccag tctcactatg tggaagcttc actatttcac   420
aatgaaggcc cagaccggng actcaaacct gtaatcccag cacttttgga               470
```

<210> 278
 <211> 504
 <212> DNA
 <213> Homo sapiens

<400> 278

```

atgtgttggc tggagctgaa gcagacatat tggaccatgt ggtgacaacg agaattgagg    60
ccaccatggc aggacaaggt gctgcagtga ataccacaga caactatagt ttcaaaggtt    120
ttctaccagc aaaagacaag aatttttgaa gacactggga tataagaatc cagcaaaacc    180
tgttgcttgg gctttaatt ttacgtctgg tctccaatgg ccttgatcc aaccattggc    240
ttaggaagaa ttctgtgac ctgatgcaa atctaaagt ttgtgtacag gagcagccca    300
gatttggtgt gttcctctac acaaggaaca attgcctgga gacatgattc acaggaggga    360
gggagtgctt tcctagaaga gctatcataa aaagggtaca caagtagatg ctcaatcagt    420
gctgactgga atgaaaagaa ccaaagggat gaaaagaagg aatngaagnt ttgcaaaaga    480
tgaagctcta natccttgcg acag
                                         504

```

<210> 279
 <211> 509
 <212> DNA
 <213> Homo sapiens

<400> 279

```

gagccagtgt cctgggctaa acacaagagt gctgattccc actgtaagtt acagtgaaga    60
acttctgcta tctgagggca tgtgttttca tcttcaaaaa aggatggaca gtcccatga    120
accttccttc tccaaccaca caggccttgc ttctggacat gcagtataa ctctctgttt    180
gctggatgaa gatcatgttg gctctatgca cattcagata accttctaca ccagacaccc    240
ctgggtgattg ctctataaat catattggcc aggagaaagg atgttcagtt ccctaggctt    300
ttcatcatgg tcaattaggg aatcagccca aaaggctcagc atcactgccc ttaatgang    360
tcacactcca tgcactctga gtaccccgga aaagctgttg ngctgggtat taatgcatgt    420
gtccagaccc tgggtttcaa cgaaggcaaa tccctggcat acaatncaa cttggtcttt    480
cttactggggg gggattcttc gagctgggc
                                         509

```

<210> 280
 <211> 490
 <212> DNA
 <213> Homo sapiens

<400> 280

```

gtggcangta aataaggata agagatgata gtcaggcacg taggttgga ccaagctgca    60
cacaccgcac agtgagagaga gacctgatcc tgcttagggc agagtggggg aaaggagcca    120
gggcctcttc ctgctctgat cccaccagc tcatgacctt ggaccagccc ntgacctgc    180
aacctcgcag aactgaaaaa ctctatgnn tgnacgnacg atnangagng ancttignaa    240
attggttctt aaacttgga gtcacacaga agactggaga cttcacatag accattgggc    300
ccttcgcccc gagtttctga ttagcaggt ctgaggtagg acctgagaat ttgcattttt    360
tgttaangnn tccaaaanga nctngannnn ttctntttt gggaanaaca ctttaaaaa    420
actactgttt caaaaacaaa aantttggtg gttttaaag gatnggaac aaganaactt    480
tttccaaaag
                                         490

```


<210> 281
<211> 520
<212> DNA
<213> Homo sapiens

<400> 281

```
gttcagccan ncantggccc tgngangaca ngnaagnen ccngnctcgn nctgggccct   60
aatgaaagga ctcaagngan gccaccctg ttacgcgcgt gagaacatgg ctggtgtgc   120
tcctctaact tggganagaa tagggctgtc tgntgtctnt accgcanagg gctnacatnc   180
nctttacggg atccgnntcn gaggannngg gccatttctc ttcccttate tgttatgat   240
gcgatatgtt ccaaagccga tcacatcagc cgctgttatg gtgaacggaa ttactgtga   300
tggcggctgc accagcagag ccgctgtggc tcatgccac gttacgcgga gtctangacg   360
gcctcaccct gctggctcgg gctccctctc actgggggtac acatttatcg ggatttatgc   420
ttaaaacaa gtagttcaca tttttttaa tgggggaaag tacaanaact ttccatttg   480
cggnngnac ctancaatgg gcttaacttt tgtttttgt                               520
```

<210> 282
<211> 386
<212> DNA
<213> Homo sapiens

<400> 282

```
gagcaggaag ctgcgtgta atccgcctg caaaagctgg aagagagggg cggaacgaaa   60
gaaccaatca tgagccagag acaaagaaca gagtaacaa tccttgggtt gaaaatgaag   120
tgggatggaa cctgggccaa atagacactt gaaaaaaca atggaaaaaa aaggttgatg   180
taagtccac ctttagatc tcctatagga caggattgtg gagaatttgc tgcataatcg   240
ggacaacctc ttcaaggggc ggggcttagg gaaggggtgg ggtcttaaag tgggcgggac   300
ctagacgaag aaggcggagt ccaatcatc actggtccac tgatccgaga tgtccaatat   360
cccacttaag atgtaaagt tgggggt                               386
```

<210> 283
<211> 489
<212> DNA
<213> Homo sapiens

<400> 283

```
caataactat ccaccttga caccttgtg accatgaaaa cctcaaggat agagcaaggg   60
ttattcatcg ctgtatcgt ggtatccagc tccatgcctg gccagatga gcagctgaga   120
ctcaagatat tgtttaact gcgcattgt gcataggtag taacagtga gatgggtctg   180
gagcccagcg atctaattac tactcagaaa cacctgtgta tgcactgtc tctcaattct   240
ccacctctc gtccaccac tgctgctgt gctgctgtc ccgccctatc attacaacc   300
agctcagctt cctcatgggc ttgtattaa gcgcctgcct gtcacacaa cttactacag   360
ctaaatgatg atgcaattc tccaggnttg catcaaccnc atgaaaaanc cncacctt   420
acttaanttt tttttttaa aaaaagaaaa aaacaggang gagcttgtg ctcaactgac   480
ctaagcttt                               489
```

<210> 284

<211> 181
<212> DNA
<213> Homo sapiens

<400> 284

aatctttgag tccacgtgga ggaaggaagg agaagaggag aagactgttt tccaggatgg 60
aaagggagcc tcgctttctc ttaggtgga ttacagaaat tgggtgaatt ctccctgccc 120
tggagaaaag tcaatttatt tttatgtta aagatttagg ctcttctga gggctactat 180
g 181

<210> 285
<211> 319
<212> DNA
<213> Homo sapiens

<400> 285

agaaaccaat cggacacatg gccgtggcag ttaattctat aggcctccca cctggataac 60
accaaagctc aatgcagccc caccacaaagc caataccttt tctccaacct gccccttctc 120
ccaggaaaagg gcagcctgtc ttctttgta ccccatcatc cacccaatta ccagagtag 180
aaaattcagt attatcccc tatctaagca gtgcgccagt ctggctgcat ctactttctc 240
aatctgttct tttttgtcc tctgtagta tcttaaaaac ataaaggga aaagatataa 300
atgccaagca aaggacttg 319

<210> 286
<211> 230
<212> DNA
<213> Homo sapiens

<400> 286

cagaaaatgg ctctcaatt ttctatctca tgtggaggca acattctgc atcagattca 60
gcctgtgggc aaaggaatga ggcttctct acgatccttc aggttgcccc ttctgaagt 120
agcaaagcat gtgtcattat aaaacatgat tgtaactcct ctttcagtgc cactgatttt 180
gtcgtgtggg aaatttttg caggttttg caataaagtg tctatcaagc 230

<210> 287
<211> 329
<212> DNA
<213> Homo sapiens

<400> 287

agggccacca cagatccggg catctgatc aacattcagt ggcaagcctg gaggggcaat 60
gcttgctcc cattgtatgg caggccagat atgttcttg cccatcagaa gcctccttct 120
ggatgcagtc tataagccac tgtgatgat gagaagagcc caggatggag gtgaaagtct 180
ggaactggaa tctgagccct tattttctg actcactgtt ttaccttga agaactcctg 240
aagttttctg catctctgtt tctcatatg tttaaaaaag aaagcactta accttggtgg 300
atgtgaaaaa taaatgaat aatttctag 329

<210> 288
 <211> 452
 <212> DNA
 <213> Homo sapiens

<400> 288

```

gaaatgcac ttatagcaga gagctggcta cctgccaaac caaacaatcc ctgagactgc   60
ggcagggctg ggaagcaagc tgagctgcca cgctgctaac ttgtcaaaca tacataccgg   120
ctttgcttaa caacaatgcg acacgtgcct gctagaagcc taaggaaaca acatcagaag   180
acagatgagc tataaatact tagaaagagt acaatccctc gatcaaccaa ccaccccaaa   240
ctttctcat cctgttcttg aagaagtgc tctttactgg gagcgtgaca cattcagacc   300
taaggagcca ctgagaaatg cagcaaataa agcatagaga gcacattga ataaaaggac   360
cagagaacca ggaaggaaca tcaagacatg agatctacag aatcaaagag aaagccctca   420
cattatatca tgagattnca atggcagaag gc                               452
  
```

<210> 289
 <211> 476
 <212> DNA
 <213> Homo sapiens

<400> 289

```

gtgaatccca ttctcathtt tgcagtatcc aagagctgga tgcctacatg atgcagtcca   60
cagtggctga gcaccttctg tccctgggat ctgagactct gcctgccaca gagcagatga   120
ctggaaaacc ctcccactt gctgtcatca ttctgaaag gtcttcaggt gtgccagcaa   180
tttcagact gaatatctac accagaaaag cacataacta ccatgagcat aagacgtggg   240
agtgccatgg agtgaccata gaagtataga cagtaagatc acagccagat acaacttctt   300
gtttataga tgagagacct gagggccaga aagaggaagg cacttgccca tggtcacaca   360
gtgagttagt gagactggag cccaactctt caggggtctg ggctggggct tanccaaggc   420
tggttaggca atnggcttc ctgggggtct gggcaaatca tttttgcct actctg       476
  
```

<210> 290
 <211> 458
 <212> DNA
 <213> Homo sapiens

<400> 290

```

gtcctgctga ggaatccctgg tgcccagtag ggaacaccgt gaggaggagg attaagaaag   60
gcacccttc cactgatttg catgccatt tgtacatgga gtttggtac agcaaatcc   120
gttgctatct caccagctac aagaagcaaa gaacgaattg caattcattt ttgtgctcta   180
ggacccggtt gaggtctcct tgctgacaaa aaaggaaatg acttctgaag acatgaaaaa   240
aaaaaacagg gngaanaaaa attgggttan aataacccat gacctaaatc attanacttt   300
gactaatgaa naactgcctt ttaacagagt taaaattgac agcaccatgg cctcacaccc   360
aacaggggtt tgaggttgga ccctntttg acaaacgatg cccttgatta ccncaaaaat   420
accatcaca gcattattta taatattcct ggccaaag                               458
  
```

<210> 291
 <211> 471

<212> DNA
<213> Homo sapiens

<400> 291

```
gaatgcagct gtcaacagct attctaagta ttgtgactt gggtagaggag atttgtgtcc 60
atgtttgaaa atatgacatg acacgaagca aagagaattt caaaactcct gaccaaagct 120
ggtacagaga aaaactgact gctcaaagaa ctccatcaga tctttccagc aatctgtgca 180
tggagcgtgc acttgaaaag caagtgtgtt ttgagtgagc aggaggacag attcagccac 240
agagggcaag gagatcctcc tgttgccaca ttggaaggt gaaccattag ctgccttct 300
ggcagatgcc tactgggggt ctggagcttg gaggtgacac atggagcatg tctctctcca 360
cttttctct ntgtcagctt ccaagaaaac caganctgga aatcaaaagg ataccacaga 420
ggggcagtag ggccctccca natggctgan cagatgctgg caccatgcct t 471
```

<210> 292
<211> 349
<212> DNA
<213> Homo sapiens

<400> 292

```
aagttcaag gactgaatcc tgacaggaaa caggcacctc caggattctc tccccagcag 60
aagattactt caagaccgga gtccctctg gactgactgc aagattgaat gtgattgatt 120
tgaacctgt caggtccaca atggtgccat ggaacaataa ttcaagataa gccatcagag 180
caagtcacac catttggcac ctctagccc ccttctctc ttgcattcca agccctctt 240
cttaaaccct tgccgtctct ccagaaattg gaaattggca attttggaa aggattccag 300
ccacttccc cctcgtctgc aacggataat aaaaatcact tttttttt 349
```

<210> 293
<211> 226
<212> DNA
<213> Homo sapiens

<400> 293

```
aaaaagaaca aatcacctgc tgcctcggca ggacaggatt tctgccnntn ccacctgtnn 60
gcagccgntc atggtctcca gacaaagtgg gggcccgggg cctgcagaac agtcggccac 120
attcaccagc ctgtctctcc tctggacctc ttggcacang ctttactct ccagactgtg 180
tgtgtttggt tgaattgaaa taaacacagc aggattttgt ttatt 226
```

<210> 294
<211> 217
<212> DNA
<213> Homo sapiens

<400> 294

```
gtaaatccaa gagtcaccaa atctttcagc ttttcagcta aagaaagaaa caagtgaagc 60
aatgggcaga aagtntggn ttctattacc nagagccgtc tcttccagc cnaaatgtaa 120
tttacatctg agtgtttggg ttcatctgtc acacgagtat tatacaccc caccattac 180
cctgaaaata aatatgagct cctcattcag gtaaattg 217
```

<210> 295
 <211> 407
 <212> DNA
 <213> Homo sapiens

<400> 295
 ttggtgaccc tgaggcacag aaagctgagg gaatttgctc gaagtcacac agctgggtaa 60
 gaaagttagt ggttggtgtg tgccactggc ctacggcttt tgcagaga agacgggaat 120
 gggggtccag ttaccaacc ccttcagaac agatgggttc tcatgcccac ggaccttggt 180
 tacggagtgt gaacaggatt ctctaaata ttcaacttc ggaagaccgg attgaaagtc 240
 atctcaatta agcaaggact gagagtgtgc aaatattatt tgaacgttgg ttaacttttc 300
 cttaaatgga aatgaatgag cagtaaagtc actttgatga atcttataca gagcctctgt 360
 ccagagtcc tgaaactca cctgatggtc ataaaagaat caaaagt 407

<210> 296
 <211> 498
 <212> DNA
 <213> Homo sapiens

<400> 296
 tgggagaggg ctggaagtcc attccaacca cagaatacag tcccttcag gaaggaaagt 60
 aatttaacag caacagtcca ggaatcagac aagctacggc cccagaggca agcgttggag 120
 gggccttctg ctccacggag aactgactc cacgcagggt actgaccagg gcagggggacc 180
 agagatgaat caactccagc ccgggagctc accgtccagc aggggagata aggcagatgg 240
 aaaagtaact ataaaataag gcagacgggtg ataagagtta cacaggagat acagatagca 300
 ggcagtggga gttcagagca gagaggagtc tgggggatgg atgttagggg agattcagat 360
 gaagggggagc acttactggc ttctctccc aagaggtgcc ctaggatcca tccagaaaga 420
 tcttgaggag cccacagagt cccaacggga acttgtgctt cttggatgga ccccttacc 480
 atactttacc cactttaa 498

<210> 297
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 297
 actaagagtg ttcaaagaag aggaatcaca ctttgccag cagtatacct gcagccctgc 60
 ggctaaagt ttgtgaatga gaataaagt gggctctcat ttgaatata aggaaaatct 120
 gtaccagaaa tgccaaacaa ctgaattcaa aatgaatttc ttggaactca aactcaaaa 180
 tcagagatgg ttcagagaga aggtatctac tgctaatttc taactaaatg aaagggttc 240
 tgcttctgag agcaatgata cccggaacag gaacgaaatg ctgctagaga acagtgtggtg 300
 aagtgtgtcg acnaaactgg ctcttggtc tagtctatgc cactttcctt ggataatgga 360
 ggnccatgc tanggggaga aaagccaatc ananggttc agctgggnn gnnttaaang 420
 gaatacatca atgggaccgg g 441

<210> 298
 <211> 593

<212> DNA

<213> Homo sapiens

<400> 298

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gactctgggg actccttctt aaatcaaact gaaggacccc agcctttttt tcgccccgaa    60
agaattaang tcgggaatgc ctcccnana attngangga ngtnccgntn ccggggggnc    120
attttcttt gtgggggtca attggggcgg gtggttgca ataacaaccc aaaatcttgc    180
ggaatcttgt ggctttttn tcaaaatggg ccagaaggac gaacaagcac ttgtttcccc    240
aaggcatttt taaaaaaaaa gttccggagn aacaaaaact ggtcncagga gggatgaatg    300
naaattcact gtatcttaa ggggtggggg naagcctgat gccctnctg tattagagcc    360
cnccatgatt ctacagntn ggggggaaca acataatgcc catacatgaa nctggcttgg    420
gggctttcat ttttcccaa gaaaccaagg aaggggactt taagtcattn cccaaccaat    480
cgcttgggt tcangtttca tttcaancit nnttttggg acccannnaa ttnttgataa    540
aannaanccc aagcttcttt ntttggggg gatnaataa ttaattggc ctt          593
```

<210> 299

<211> 537

<212> DNA

<213> Homo sapiens

<400> 299

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tgggggctcc tgcttttagtc cgaactnggn tntngtttt tttnaannaa actngggcct    60
ngcttttatg gtttattggg ccaaaaanan ctactgggg aaccttttcc cnaccnccag    120
gttccccga gancttcac nattgaaaaa ggttctaggg ggcgcttaat taatggatgg    180
tgggatcctt taaggagaa aatcaaaggt ccccccttag agggacattt gacttcttcg    240
tggcagcagg gggggaattg gattgggagg taaagaaaga agctgtgagc ccagaaatga    300
attnctggaa ccagccccaa gaangnggaa aggtgangga accagattct tagaagatga    360
cttangggga ataagccagg agcttaatcc acttctggng agactcttt ttaagaaaaa    420
aggngctcca aaattncn atcccaaatt taagtnttga aaagccaggn ntttgggtt    480
ntaatgnngg gaggnaaata atttaaaaca tttccccct ttingaagggt taaccgg    537
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<210> 300

<211> 270

<212> DNA

<213> Homo sapiens

<400> 300

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gagagaaaat aaaagctcag agaagttaag cgacttgctc gagaagctac aaagtggggc    60
agcctggact tgaacacaga cagtctgact ccaaagccct ccaaagatgt aggttaatt    120
taacctacat ctccagaaa atgagcaaca aaggatgtcc agccctccag caaactagtt    180
taagaaagaa actgtcttct ttttctctg tacttgaggt ggggtggggg cagggaataa    240
acaataatca tgcacgca tgatttaaac          270
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<210> 301

<211> 157

<212> DNA

<213> Homo sapiens

<400> 301

gacgtctggg gagctcctgc attaatcag aaactgagac atggagcctt gctatgttgc 60
ccagggctgg gtctttgaac tcctgggagt caaagtgnat ccttcctttt ttggccctcc 120
ccaaaagcac tggggattac aagatgtgaa gcccact 157

<210> 302

<211> 200

<212> DNA

<213> Homo sapiens

<400> 302

caagaaactg agaaatgcct acccgcagga aatggggntg ggctttttt agccntgctg 60
gantgtgaac aactggtgga atgggtgccct ggcaaccaac cangggaaaa gggcaaatgg 120
tttattattt aaagggtgga atttctttg gtggaaccaa aaaataaaaa ataccacaaa 180
tttaaccct ttctttttt 200

<210> 303

<211> 284

<212> DNA

<213> Homo sapiens

<400> 303

gatgatgaaa ctcccatggg gccagccaca gcagtaacca gactcagaaa tggacattct 60
tcacactgag ctgcataac ccaggagaga gaagaggaga ggcaacacgc catattttct 120
aatgagttaa agcctaattt aatctggaaa taactaatgt tgactagtgt gtttcccta 180
aaataattgc ctctgatggt caattttata gctaaaccta aaaaagatga ttaggaaac 240
actgagaagt tcacccctct tcccacaata aaaatatact ttgc 284

<210> 304

<211> 353

<212> DNA

<213> Homo sapiens

<400> 304

aggactgaga ggagaaaatg agacactgag tgggactcag ggattgctcc aggccacaca 60
gtcagcagga ggcaaagccc agattcaaat gcagattact cagctccaca atccacatcc 120
tcacaggagg ctgcactcct tgcccaagcg tcagacagga gcaaagagaa agaaggcaac 180
cagctggcta ctttctccc ttcttggatg cctccaacag ggtgagaagg actaaacaaa 240
tgaccaagtg tcacccatt ttggacatac ttaaaacacc ccatggaatt tttattctga 300
ctttctctg cctgtgtggc atttatgttt aaataaaaga gaattcaact cgt 353

<210> 305

<211> 423

<212> DNA

<213> Homo sapiens

<400> 305

atcctgcgng gtgtggctga acttcccacc cangganttg accagacttt gtcaacagcc 60
attcangaac tggcacaatg gactcacaga taagattcca ggggaagagg acatgttgc 120
acnaacactt aggacttgaa atcctggctt gtggaggata gcatgacctc ttctcagatc 180
tgcaaaaatg ctgatgggca gattcaaaag agtcaacaat aacttcgctc tgacttggtg 240
aaaactgctt ttggaagaga ttctgtttgg gaaatttgtg ggcctgagtt accagtcac 300
tgttctgcc acaataactg tcatcattgc ttcgaagcaa tgtttggctt ggagcagtc 360
cgaatgagct gcctatcaca tgttgacct aaaataagaa gaataaataa ctggcacaaa 420
ctg 423

<210> 306
<211> 431
<212> DNA
<213> Homo sapiens

<400> 306

ataaagaacc ctcttaggat ggtgaacaga aacactgaag ctgggatagc ccctgtcag 60
gggccatttg tcattccac aggccaagaa cctggacgct gtccccacat tggggaaccc 120
tccaatgcat aagccaaatg ggaactggaa acacttctt gtcccccaa cccagggct 180
ctctctgctt gtacacacg cctgccccag cagtgggaatt cagagtccgc gaacgaagca 240
gcaggaactg ggcggcagtc gctgtttcaa gattcaaaag caccagccca aacacaaaac 300
cagtgtgtac tccgtggaca gaaagtctg agcagcgccg gtctagatga attattaaat 360
tgnnnannat tctnncaagg ngtanccccc attggaaccc agttttatta ntccccgaaa 420
tatattaaat t 431

<210> 307
<211> 333
<212> DNA
<213> Homo sapiens

<400> 307

gaagaagcac cgtggggggac tctactgca aagaagaaca ggaccattat caacactcct 60
ccctctgtt ccccaaagtc ccctctgac cgcagcatca atcttcacg ctggcccggc 120
cggaggtggt gccactggca gatttaaag agagcatgaa ggtgggacct ccattactgg 180
attagtgtcc ttataagaag aggaagagac cagagctcac tctccccacc acgtgaggat 240
acagtgagaa ggtggctgtc tgcaagccaa gagccctcac ccaaacagaa tctgctggtg 300
tcttgatgtt ggattttcta gcctccagga ctg 333

<210> 308
<211> 349
<212> DNA
<213> Homo sapiens

<400> 308

ctgggtttcc ctatccccgt gggcacgctg gtgtgccgtg tgttcttgcc aatggaatgc 60
aagtagaagc atgtgccatt tctgagaagc cagataaaac atgttaggcg ggctcctca 120
tgctctcttc tctctctt tctggaatgg cgatggccaa aagaacctg gaaggcataa 180
actgaagaca gctttacca cgaattctt caagaagatg tgaaaaagat ccaccctca 240

acctgacact cccaacctgg actgttaccg tgaaangaga aataatcatg tatttngtt 300
gcttgagcnt ttaacccttt tngntaaaag gtaaattgct tgagacttt 349

<210> 309
<211> 157
<212> DNA
<213> Homo sapiens

<400> 309
gtgaagaaac taagaatcag aggagttcta actgagccat gaggactcga ttctgaaaa 60
ccttatttat aaaaaacagg aatgggaact aaaacaaggc aacctgtgca agcccttaca 120
agtttttcat gtattacagt aaaaggtaaa gcaactc 157

<210> 310
<211> 217
<212> DNA
<213> Homo sapiens

<400> 310
gaatgtgctt gccctccact tcctctctcc tcttctatg gggctggaaa tatgtggat 60
ttggagttag ccaggttcca caatgctgat gagtacaata ttccaggaga cagcagaaca 120
gcatgaagaa agaaacctgg atctgcaagt gccagcagt gagcagaccc caccaacact 180
gggccactgc ttctggacca tcctaataaa gtaatgc 217

<210> 311
<211> 650
<212> DNA
<213> Homo sapiens

<400> 311
tgggccgtat ntaaaaagnc catgtenaca gcnnnnnngc nanccntnat ganaaaantg 60
gaaaantnag ggcctgntng gagcnaccn aaatntttct attctccgc anctgccnat 120
nactgnnggt agangnncgg gagcancatc ctatgaagaa aggaactagc tcactcggtg 180
nnnggacnac natntttnat cctttaaccc tcaaggggna gtcattctcc tgactgetaa 240
ccttactttt gtaagctect tgaacacaga tcactaagaa ttctagagga gctattccca 300
gaagacatac aaagactgen gatccaaatg actcaagagg tgaaatgtaa tgtatgctgt 360
ggtgtacttc tcagatgcct tcaccttagg tctgaaatac tcattcccca acaatgcctc 420
catgctaaaa agtgttggtg actaatgggt ctcaactgag cccctctcta agcattaccc 480
tggagaagcc canccaaagg gtaccttacc caaagancac acccgatatcc ctggagtcag 540
ctcacattca ntggactgnt caaagccena gcantaaanc ttgggggcag aaattaatgc 600
aagggaaga ccncttttga aaaggcccng atnctctggg gaactggact 650

<210> 312
<211> 541
<212> DNA
<213> Homo sapiens

<400> 312

ctnaactgat ggacttggct agnccgctgc canccacatg gagtgggagg atcacggagc 60
ctgaagctga gaggccacag cactgcacct gacatatatt accaactgc catgcaactt 120
catctcattg actccgcatt cccattttt ggagtggatc acctgcagtt cccttgacaa 180
ctgagtgtct gtatttttct gtatcgtcca gtgtgatgac aactgtctac acaaccaagt 240
ctggccagca ctgaacacac tcagcttccc cacagtgtc caagtctca agcccaaact 300
gcagccaaat ctttggcagg ggttgnctc tggtcaggcc anaacacctt tnttgaanga 360
cctttctgaa catttttaaa ccattcgatg aatgacccta aattcttggc gcataatttg 420
ggactgntgc catcacgcca gaaacattta ttaaacattt actngtcag ngctcaagac 480
ctgccatctt gnttnatntt gacaacagt atgcacaata nggggtgnca ttcccgttt 540
c 541

<210> 313

<211> 295

<212> DNA

<213> Homo sapiens

<400> 313

gcccttctg ctgtctact ctgatgatgc aagctgcaac cctgtaagct gttctataga 60
aagaccaca tggcaagtac acaaggatgg ctttggccaa cagcctgtga ggaactgaat 120
cctgccaaata tccacgagta agcttagaaa cggaagttct aagctcccta ctctggcctg 180
gagatgatac tgaccaacac ctggaatgca gccttgtgag ggaccccgaa ccagagaccc 240
agctaagcct tgctcatatt cctgacccat gagaacaatg agatgataaa tgttg 295

<210> 314

<211> 161

<212> DNA

<213> Homo sapiens

<400> 314

gttaagatct aagaacgttc taaatctctg ataggatttc ttcaagtta agaataaga 60
gtcaaaaagg aaaaaaaaag aagcactttg ccaaagacaa acctgaacca gcaacagagg 120
aataacagta aaacatgcaa ttaaataata atcaaatagc c 161

<210> 315

<211> 277

<212> DNA

<213> Homo sapiens

<400> 315

gacgcaagct gacctggtgc aacgaagctc ccatccaacc aaaatgggcc agattgtggt 60
taatggacct taccaagatt tctacagac accacacat cgaggattatt gattggaagt 120
gtacgccact acattgact gaactgaag ttgtagactt tctcaaatgc ttcaagaggc 180
atttgatagc atcattgttt ataaacaggg aaaaacttga ggaaacctaa atgtctaaca 240
actggaaaat ggtaaataa attgtgttac agccatt 277

<210> 316

<211> 135
 <212> DNA
 <213> Homo sapiens

<400> 316
 gtacccagtg cacgtcctga tctccagctc tccagcggct tanaacagac acagaatggg 60
 ccgggaccag ggaccacca gagacgtctg tagttaatag ctggcgctct tccactaata 120
 aagttttatt gaaat 135

<210> 317
 <211> 562
 <212> DNA
 <213> Homo sapiens

<400> 317
 taccacgaca acagcctaac cccaactaag gtaaactctg ccaccaaaaca tgcctgggaa 60
 tggagaaggg tctgcagatg agaaccctt ctggttctat gattcaaattc ttcattcact 120
 caaagcagga accaaatcca gtgctctcc attgttgga taaatgctct ttgcctgaat 180
 gctatttggt gtcttcgtag aatggagagt aactgaaggc cccaccggaa atcaatttta 240
 tgaagcttt tcattctctg gctcaagta ttctaaaat gtacctttct atgcaggcta 300
 cttattcagg caactattt canggggaaga tactcaaattg aaaatagaga atcccttttg 360
 gccttttget aatatttcat ttgtcaaac ttgatagtc tgacaaagtc tttaccatga 420
 gattggtaaa ctacggaag ccaaactgtc tgggatgcga ctcaactnc ctacttacga 480
 actncataat aatggcctaa cctgcctata cctcaantn ccatctataa agacaataaa 540
 agccctattt cctcaaaaaa ag 562

<210> 318
 <211> 362
 <212> DNA
 <213> Homo sapiens

<400> 318
 aaataacacg gaaagacagg cctgttctcc cggaactgac agtcggaggg gaaaaagaag 60
 gaaggatgct gttcgaatac aaaggaaggg gatcttacc aggctggatg ggagaataga 120
 acatatggtg ttccattct ctctccagtc ttcaacccc atcatgttc ctgccctgga 180
 gagttgcttt gactatcaga gaaggcatac tataatggct tagttggagc aaataaagag 240
 gcaggaataa gcctgtttgc tgaaaggagg tggaaaagcc gtgtgcagag ccattatcag 300
 aagtaccac tggaccaagg ccttccgtgg ntccagcan aaaagtaacc ttgattattt 360
 gt 362

<210> 319
 <211> 410
 <212> DNA
 <213> Homo sapiens

<400> 319
 aaagatccag attacctgaa gctgtggttg gacacttttg ttctagcta tgaacaattt 60

ttagacgttg actttgaaaa gctgcctacc agggtagatg atatgcctcc aggaatatct 120
 ctgcttctcg ataatatct gcaggttctg aggatccagc ttctacggtg tttcagaaa 180
 atggcagatg ggtagagga acaacagcaa gccttgtaa tttgcttg caagttcttc 240
 attattctt gcagaaatct atcaaatgtg gaagaaattg ggacttgctc gtacattaat 300
 tatgncatca ccatgacaac gctctatatt cagcaattaa aaagcaaaaa aaaagaaaag 360
 gccagcgagg ccaattcagc tnggacttaa ccaggctgaa ctgctcaaa 410

<210> 320
 <211> 27
 <212> DNA
 <213> Homo sapiens

<400> 320
 tgtttttaa gcaaaaaaga aaaaagg 27

<210> 321
 <211> 207
 <212> DNA
 <213> Homo sapiens

<400> 321
 agacctgtat tgccttaaca ctcccagcaa tgaccacctg caagcttgcg ctgcgactcc 60
 cgtccgaaga catgcgggcc agtatgagcg gagaggttcc cagcaccgct acaagaccct 120
 gtgctattat ttagactca cctgtggctg ttgacaacac cacacacatg aatgatgct 180
 caccagaatc aaaatactca gctaaac 207

<210> 322
 <211> 400
 <212> DNA
 <213> Homo sapiens

<400> 322
 taannngatg tacatggact gatcagactt nctgacctg ngacanatcc tgccagtaac 60
 atgagaggaa atgagaacga ggctttggag cacagcattg gattgctcat gcagaacacc 120
 acccagtgcc ctttcctct gtcacaatga acagccatgc tgcaggtgac ggctgctctg 180
 tcaacatgga tccggcaggg cagatgagtg gatccccag cggactcatg agagagcaaa 240
 caaaaagtcc atatgtgtg tgctaacca ctgagattgt gttggttgtt acggagccta 300
 acctagccta tccgacacg aggatcagac atgataatca aatgtgtta taaagtgtg 360
 gatggaaata ttctgacaac attaaaagac tctaccaag 400

<210> 323
 <211> 197
 <212> DNA
 <213> Homo sapiens

<400> 323
 gaggcattgag gaggtgagag atggaaagaa tgctgtctgt catttggagt cagaaggaaa 60

agaaggtga gggctgcca gctctgctct agtggttttt tcctgtttca ccttttaca 120
aatcgagata atcgtttcta cttggtagcg atattgtgag gtgtaaaatg gattaataca 180
tgcaaaatgc ttaaagc 197

- <210> 324
- <211> 360
- <212> DNA
- <213> Homo sapiens

<400> 324

gtgaatggac cctgagaggg cccagccatg tgatggaatg agccatgac cctgagtcct 60
cacctcaggg agagatgtgc agaagagcca cccaagtggg gatgtgctgg taaacattta 120
gtgacccatt tgagggtggt ggggagggtc taactggtaa catttgtaa ttctgtaat 180
gcatactcct actaaggctg cttttaggca accaacgtga tgcactgaa cacagtttg 240
aatggatgca cataatcagt tctcatgac caggatgaac cagccctagc ataccactgc 300
ccctaacca catatnactg ngcatcntn aaaaataaac atattggggg taagccttg 360

- <210> 325
- <211> 428
- <212> DNA
- <213> Homo sapiens

<400> 325

aataaacctg aagtctgtg cgcaccgaag acataaatga cataaatgtt gatggaagga 60
gaaggatttg aggaaggacg agagtctgag gaacaagaaa ggactgcagt agtgaaacag 120
cggaagaaac gagatcattt ttctcttata aaaattctgt aaacacagcc attctttctg 180
tatttgtaat ttgaggaccg actggagtta ttctgagag ggctatgttc ctgagagaac 240
aaaattattg ttttgaaac tctagagaga actgctctgg caaaagaaat gtatctttc 300
atctacagcc attctgaggt gaaagatctc atgacactc tggactatac aaccacaag 360
cagacttcaa ggatacctac aggaacccca gtagtctga ttgatcacac aggcctaaa 420
gacctat 428

- <210> 326
- <211> 431
- <212> DNA
- <213> Homo sapiens

<400> 326

cagtctacta tgggttcata acaaagagt cccacattt acatcaaact acctggcct 60
agtcctgtgc ttcaggaaga agtacattta cactctacaa atcaacaaga aaaactetca 120
gaataggaag cctatgaaaa agctatcttt atttctcgtt gtgtaagagc ccatttctaa 180
tcttgacgta ctcccgtttt accaagtga gtggcatgtg ctgtagtccc agctactgag 240
aaggtgaat caggaggatt gtttgaagcc agaagtcaa gttaacctg ggcaatatag 300
tgagacacca tctcaaaaca agcaaacaaa aaagaatcat cacttgagtc ctttctcaac 360
ctcagaaagg gtcattatct cttcacctta caatgagaaa cctcaactac tggtaagct 420
taacagctaa c 431

<210> 327
 <211> 90
 <212> DNA
 <213> Homo sapiens

<400> 327
 ggttcagaa cgtataaaaa cacatgaaaa atgatacaca cagtactgg cacataggaa 60
 gtactccgta aatgttggct gatccaccac 90

<210> 328
 <211> 212
 <212> DNA
 <213> Homo sapiens

<400> 328
 agaactgagg actcagacct gggagaacac gccactgccc agacacgttc agcgacagat 60
 aaaacagtat aacattttgc aaaggcaaat tctcctctt ctgctgtaga aaaacttgg 120
 ttcttctca tacacactga gtccttctgc tcataatgct ggtcctaaac accttaatcc 180
 aaaagcagcc aataaaaagt tttaaaagt cc 212

<210> 329
 <211> 256
 <212> DNA
 <213> Homo sapiens

<400> 329
 gtgtcagaaa atgccacaga gcacagaaga caagaagagc tcctgtctgc atatattgca 60
 tcttccgttg ggcacagttt cactgatgtt atctgtaaac agaaagggtg agacgtgatg 120
 actcagccaa cctccaaat cctgagggtc atctatgctg ccggaggcag aaagtgtcac 180
 tcccgttca ctccccgcag ctgtgtgtt tggaatttct gaagatttta ttttgatga 240
 gcaactttgg gagacg 256

<210> 330
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 330
 tgatggtcgc cccattgcgt atagaggaaa tggaggaaaa cttggaagta ccgccttcca 60
 taaaagtca aggategaga cttcctctc cgtgtccag aatccctcag gaaatacgcg 120
 catgccttcg catctagagc aagcgtgca agaattcaca gaacggccag aagttcccca 180
 tcccgttgtt ggcactcact gcgttaggcg ctacgcctcc agtccgggcc gcttggctt 240
 gaagacggcc gtttcttc ctgatacctg cttctagtct ttctgcaact tctggattcc 300
 tgtcattctt atacctgctc tgggcagcct tccattcatt ctgcgaattc cctgaagctt 360
 ttcaataaat tgettttctc caattt 386

<210> 331

<211> 200
<212> DNA
<213> Homo sapiens

<400> 331

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catgcggaca ccacccaag ggagcaatca ggagaagcag gcgcgcaagg ccccggaagc 60
atatgccagc gtagaagacc ccaagtcaaa ggtcaaacag ggcacttgat cactcaagtc 120
ccccgctaga ccccttctg cgtgtacttt actttcggtc ctgctctaaa atgttgtaat 180
aaactttcac tctgctcgc 200
```

<210> 332
<211> 42
<212> DNA
<213> Homo sapiens

<400> 332

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ttggctagag atttactaca tccgtccttg gaagaggaaa ag 42
```

<210> 333
<211> 448
<212> DNA
<213> Homo sapiens

<400> 333

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gtagatgggc cagacgagtc taagaggcag ctccgggcat ctctgagcat tgacttgcgg 60
acgttcccca gccctggagc tccatccagg ctgggaagag ggaggaccgt ggagatttcc 120
atgagtgtcc cagcagtgag aatggactct tgccgggcag acagacacag caaggctctc 180
ctgggtgctg ggggaaactg aagctgtcag tgcagctcc gaaagctctt tggagaggct 240
tcccaagggtg ggatgcaccg tggaccaggc tccaagtatc gtcagaacta ctggaagatt 300
gttttcaaga taatctggaa caggaagaga agacacaaaa gcccagaat cagagcagct 360
ctttgcagga atttgattaa ggaaatgaga cagggtctgga tgcagtggct cacgtctgca 420
acccaaccc ttcgggaggc tggagggtg 448
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<210> 334
<211> 246
<212> DNA
<213> Homo sapiens

<400> 334

```
atccccgctg ttttctgcg tgatgctgat tgctggctct ggtcccagg aggcgcccac 60
gatcggatta actgccagct tctgatgca cagccttgtt atcagcgcct atatccttgt 120
tcagcaaagt gcctctccac caactaatg tcttttcac caccatctt ctgcacgatg 180
tagtcacagt aagacacaga gtgtgcagtc ccgatccag tgctacataa taaagatcca 240
gagctc 246
```

<210> 335
<211> 356

<212> DNA
<213> Homo sapiens

<400> 335

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gcctgccc at ggctgctcat ggaacaatcg gctagcgttt cctcccctct gagatccata   60
aaagccggca gctcagccag agcagggcag agggcagagg acagagagat gatgggatga   120
cccgtgcag agaggagcta cctcctgct gagagcttca gagacctgca gagacttcca   180
aatgatctgc ctgcagagat gagccacgct ttccagggtt ttctctctgc tgagagctga   240
gtacttgagg agagggcctg cctaggagcc gacctgacta cagagaggat ctgcccactg   300
tgggtctctt ctgttctaac actaaataaa gtcctctttt atcttcttca cccttc     356
```

<210> 336
<211> 225
<212> DNA
<213> Homo sapiens

<400> 336

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cctgctagca gagatgaata acgcgctgaa gaagcaagtc cctggagaga caggaagaga   60
tgagagagac ccccaagttg tgtgatcacc tccagcacac tggagactga gccgtttcac   120
aagtggtcaa acctacattg cagcctgaag gatgtcttca ctctctcctg ctctctcgcc   180
ttgtatcctt catagatttt tcccgcaata aaactttgca tatct                     225
```

<210> 337
<211> 431
<212> DNA
<213> Homo sapiens

<400> 337

```
atctttaa at taactaagga tgaggaaaag ttgtgttca gttcaagatc acaatatatg   60
gagaccaaag agctgggtgt aagtcaggt tctagccaaa ctgcatcagt ttctgcctt   120
tggaacaaaa tgaaagcaca gagacactca gagaaaagct gccatcagca atacatattt   180
caagcggaga gcaatggcta acctgcttct ttggggggcc caaaggaatg ctgccattgg   240
aaggcacttg acgagatgat atgtgtccca gcatcagtat catcattccc aggtgaaaga   300
cgggagagag ctgctctgtg tcacaacctt gttcttaatg ctactcaata aatttctatc   360
tggttgagg gcaaagaact tgacacaatt tacttagaat ccnaactgga aataataaaa   420
atctttcata g                                     431
```

<210> 338
<211> 244
<212> DNA
<213> Homo sapiens

<400> 338

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gctggagtgc nanggcacaa tcttggctca ctgcnaccaa gagaagaggg ggaaagaang   60
ganaaggggn ggaaggaaga tggaagagca ggagctncaa aaaaactntc cgctttgcca   120
cctggaatgt ccaccagga taaaaagatc caagctcttc tganactgnc ttttgacctt   180
ctanaatgcn nagacaggac ggngattgtg cctgaaaaga tcctcccaat aaagatctcc   240
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<210> 339
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 339
 gacccgcatt aagtcagag aaggcagcaa agctggtaaa gaaatactac aatccttctg 60
 gagaccagaa tcctgacttc tggatgtgac aacaatctaa caggattctc tgatgcagac 120
 tagcaggagg tatgaacacc cctcccaagt ctctctctgc caatatgaaa agctgtcca 180
 caaatcttgc ccctatacgt agagggcgan tgaagagaac actgatctca attcaagaa 240
 gaaactaaag aacatctnca gatttttctt ctatctgaag agtcaaaact aattaaactg 300
 caataacttt ctaccttgnc ttcaaatctc ttacgttca aaacttccat taaccattt 360
 catataatct ccactacc 378

<210> 340
 <211> 239
 <212> DNA
 <213> Homo sapiens

<400> 340
 atggcgccca tcaatgttga ttcagaagtg aagccaaaac ataatttctt ggcactattc 60
 tggaggaaa ataagtgaga tagagtaaag atgactacat agccaattag aaaaagcaac 120
 taccacctcc actccaaaaa agtcatgtaa ataacttcta gtctgtgact cgtcttcacc 180
 attctgtgca ctggctttaa aggagcggtt tacactcaaa ttaaatatc tctttgctc 239

<210> 341
 <211> 308
 <212> DNA
 <213> Homo sapiens

<400> 341
 gcacatattc atgtatggc actttaacgc agtgetaccg tctgagacgt gtcggacaaa 60
 ggcttgggca gaggggctag aaaccatgta tcaccaaagc caacttctt cccagatttc 120
 agaattgctg gttcaactgc aaaagtagga aggcaatgag taatttctgc tctgctggac 180
 tagattacca ttaactacca tcatgacttc agaagatgct gtcacgatga aattcatttc 240
 tgctgcctaa ccccataata aggctggctg ttctctttaa gtaaaatgac taagctattg 300
 atcttttc 308

<210> 342
 <211> 439
 <212> DNA
 <213> Homo sapiens

<400> 342
 agaatcagaa aatcaggcaa tgcagagaaa ggaagagcac tacctccaca gagcagaagg 60

aaatccaggg aaaggctggg aggaaccagg agctgaagac agagctgtgc gccttcctgg 120
 ccctctcct taaatctgag atgggaatcc agccattgca ccagtacatg gatctgcaat 180
 tttttcttc ttcaaaggac caaacgggta atactttagg catngggggac cataaagttg 240
 ctgtcacaac tattcatctt tgtcactgta gcttaaaaac agccatacac aataggtgta 300
 catgccaaat gggcatggca gactaaaaag actaaaatga caaagcctct atgaactagg 360
 agaagaaagg cagtaaggga gattaaacng agctgaaaca aaaagggtga tgcataaaag 420
 aaagagttgg aaaaagatg 439

<210> 343
 <211> 463
 <212> DNA
 <213> Homo sapiens

<400> 343
 ctaannngat taggcataga ccnaaantga anactctgga tgtgggtggct ggctncttgt 60
 gaagaagaat tcaatcagat tccatttgat taatctgcat tgagatccta gtatgtgtcc 120
 gacactatgc agaaatactt cactccctct tccatggcag accacgatga actaggggtt 180
 gctgttttca cggcttctgt cactgttggg gctgaggctg aggctgcagc aggagctcct 240
 ctggcccccga ggcaagagac atgttctctg catcccagg ggacccaaag caacttctgg 300
 ttggggttaa agaggacttg ggtgaccca cctgccagt catccacct ctggcagcca 360
 gggcggcagc aggggagggg gcagaaggct gccacagngc ttcttcccc tgcatttcc 420
 tctgcagctc cctctctggc cctgttttc agacctctaa taa 463

<210> 344
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 344
 gtcttatttt ttctactca tgagccaaga tgcagagagt atttctgcag tcagaggaga 60
 gatggtcctt acaaattttg caattggaag gatgaggcaa aatgaggcca aagatgaaaa 120
 aaccaaggcc tggataacta attcacagcc acacaagtat ttagtgcgaa aaaatggtaa 180
 tagcatgcag ctctctctgt tcagtgcctt ttcaggatg tgaagaaaga tatctgtata 240
 aatatgagaa gtccttccca aataagtaaa gtaactggca taactgagga gctctttggc 300
 aaatctactc tgtataccaa ctcaagaaaa acagggaaaa aacccaatc tg 352

<210> 345
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 345
 aggcaaaaaa caggacctag atctggaaat caaaagtgga agcagaaaat tgagcaatca 60
 gcctaccang tcnagtgggg caacagacta cgctcacgga ttctgtcac aacancggga 120
 ataacagacc annagaagaa ctgcagagca tccctctctc ccccgttcac ccgtgccag 180
 agcacgtgag tgcattcaca ggcagcacc agtctctgt tccactgact ccagcgtcca 240
 ctactgnga gcctactaag tggccacatg 270

<210> 346
 <211> 236
 <212> DNA
 <213> Homo sapiens

<400> 346

atgggacat ctagtgcag gaaaagaagc tcaggggtcc tactgattct accttatgat 60
 ctttcccttg ctactggcaa gatgtatgca tattccggat cccaggtctg ttgtcccctc 120
 atgccaatgtg gaagtttccc aagactatag agaaatgttt agatgtgcag atgccacaca 180
 ctaattctta gagtttctac ggccattatg actaaaggga ttttgtata ctgttt 236

<210> 347
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 347

gtttggcttc ctgagacag aggatcttgc tcgcctcaaa gaggagggca gtttgccccc 60
 ttctcctga ctccaagaca aaagagagaa gactgaagag tgggatccag ggcctctcag 120
 agttcacctg agctttccca agtctgggtt gtctctcta cctgtctgct actactgcaa 180
 gtgacttica caagatgctt ctgagcatag cattgctctg ctgtgaccac tgcagatgtc 240
 aagagaattt ctgccttttg gaacttggac aatattggcc acctaccag agagaggaga 300
 aggataatcc agacataaag ggagcttcca cccatccttt ggatctcntg ataaagagtc 360
 atatacttaa agagccatcc tcacattcct gccagactg tgagctgcat gagagaggcc 420
 atgtctcatt ttgttcatt tt 442

<210> 348
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 348

gaaaggaaat aacccccgaa gcctttgcaa ctaaggacat gtatccttca gagaagtgtt 60
 tactgggcaa ctcttccttg ctgtaattga gtgtggccga ttgtcaciaa agatgtttgc 120
 aaaatccctc ctgtccccta actcattct ccttgcaagt tcactctgcc aacttctcct 180
 gtcggttggt gaagactgtt tctctcccc ctcaaatatg ggctgggctt gtaacttgct 240
 tgaccaatag aatgcagaga aatgaaatgc agccttcaac attcaaggct atgtcaagg 300
 agtctaacc tgtggatatg ctgttgtaa atgaggagc ttcgattagc ctgttgaaga 360
 cacacagacg acccgacagg caataccaac attcaagata tgcaagttat gctgtcttaa 420
 accatgctgc caagtgaact tt 443

<210> 349
 <211> 165
 <212> DNA
 <213> Homo sapiens

<400> 349

agaactgagg tgtttctctc caggatcttg ctacttattg atgacaccgt atcaaggcgc 60
 cagagtccaa atggtcatca taagaaaaac tgcacctaac ttccacagcc tcctaggagg 120
 cccagagaca tcactgtact tgctgccat cctatgtgtg gctgg 165

<210> 350
 <211> 307
 <212> DNA
 <213> Homo sapiens

<400> 350
 gtggggtctt tcaagccgag atcgcgccat tgcactccag cctgggcaac gagcgaaact 60
 ccgtctcaaa aacaaagaag ctgtcattcg gccccagatt tgtgctcga aaccaccacc 120
 gtgaggtcgt ttccacagt ctccgagggt tgggggctga caatcctgca caggaaaact 180
 aggcgacatt cccaaatcat cccttgaca gccctaattc tacttttaga aggttcttgg 240
 taccatgaaa acgcaaatgc ccggtaaagg cagatttacc atgaagctaa taaagctcta 300
 acctcag 307

<210> 351
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 351
 gaatccgagt ttctgacta ctggaaccac gcctcccaga gaaatcaagg agacaccaga 60
 aaaacctct caagggacag ggaaaaatca cggacaagct ttctccctt ctcacctccc 120
 cctaaaaaag cccagtgttt ttctccctt ccagctatgc agctgcaccc agcagagaag 180
 tactagatta gcatcatctg catttcattc ctttctttt gcaatagcta ctgcctata 240
 ataaacagac ctgtgtctca agggagaatt tacttccccg tccagt 286

<210> 352
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 352
 aactctgcag ttggtgtcag aagtaatggt gatcttgtgg actgtttcgt aactttgaac 60
 agacaatgaa gaaagacact ggtaaaatc aataatactc tgcattctgc tggactaact 120
 gtaccaccc aggctggtga tccataccaa gagactaatt caactggctc tgtgaccct 180
 actcaggaag tgactcagca taactactg cacaaagaca gtttgacac ctctatgatt 240
 tcatccctga cccaagcaat cagcagcacc cattccctag cccctgccca ccaaactatc 300
 ctttaaaaac cctcatctcc aaatttcaa ggagttggaa ttgagaaat atttctcaa 360
 tatctccat cctcctgtct cagccactct gcaattatta aactcttct ctgtac 417

<210> 353
 <211> 162
 <212> DNA
 <213> Homo sapiens

<400> 353

gacattgtta ccatttacct ccaactggata tctattttct ttcaaaaaga agctgagaaa 60
tcttaatgga aatatcaaatt ttctacatga tgcttccttg tctcttgagc tctaaaaaag 120
acaagaagaa aataaaaaga agtatctatt gttatttcac cg 162

<210> 354

<211> 235

<212> DNA

<213> Homo sapiens

<400> 354

acgangntgg aaaactgaaa gaaaacatat gtcaacgcat gtgtggaatg agactctcaa 60
ttcactctgc agctactgct ccagctaatt tagagcagtg atgacaggct tggctgggga 120
gacatggcca gcccttgga aatgcacatt ccctaaccat actgtaaaat ggtggggttt 180
attaacaatg tatagtgcta acataaacca ttaaatgaag cccactcaat tctgc 235

<210> 355

<211> 227

<212> DNA

<213> Homo sapiens

<400> 355

gcaaagccct cctgttccca gcccgaagtc ggtaaaccac atgttaaatac tatagggtga 60
agacctggat cattcgaagc ccagagcctt gcacagcagc gatctgctcc aacagagggt 120
gatgtcatca tccgaggcca cacaataat gcatttctca ccatcaaaaa gcctctgaag 180
ccatgttctc aaaggcaaaa aataaataaa taaataacca attaact 227

<210> 356

<211> 357

<212> DNA

<213> Homo sapiens

<400> 356

gatgtccgga agaggcaggt ancgtggaga cggagggtcg gcggggcaca agagaacttc 60
cagggccaca agcgactctg catgaagctg tgatggggac accgtgtcgt cgccggttg 120
tcggagctca cagaatgagc aacgctgcga atggctctcc tgcagccgg gacttagtt 180
ggcaacagtt tatcagtcct gcctatcaac tatacaaggt cctggccgat gcaagacgct 240
gagcgcaggg aaactgggag ggggggataa gggaaccttt gtagtctctg cacagttttt 300
ccgaaaaatct aaaagtgttc taaaataagt caattaataa aaccaaacaa gagcttg 357

<210> 357

<211> 369

<212> DNA

<213> Homo sapiens

<400> 357

gaacctgctg gaagctgttc tgaaccagag aaggatgaaa atagctgcca aagatgttgc 60

catagcaact gctttccttc ctgacctcct tggaagttag tagttgactt tgcagttgaa 120
gtacttttct gaaggcagaa gaggctgtca gccattttat actgacctaa ctttcttctc 180
ttgaaggatga actccctcat ttccagagt agtcaaggaa tttctgtgcc tctacccatg 240
gctttgggta ccaactcatc cctgggggcc ttggtttctt tctgtgaaat ggaatattca 300
ttccagcact caccaccttc taggctggag taaggctcca actttgcaaa tgctggtaag 360
taaactgta 369

<210> 358

<211> 170

<212> DNA

<213> Homo sapiens

<400> 358

gnggggtctt tctggcatgc gtctgnnaca ccagccactc cagaggcaga ggatgatgca 60
ggagaatnac ttgagcccaa ggcngtggag gctgcattga accgtgatca tactattgna 120
ctccagcctg gataactgag caagaccctg tctcaaaaca aaacaaaaca 170

<210> 359

<211> 430

<212> DNA

<213> Homo sapiens

<400> 359

tgtccttcaa aaggagtga aaatccaca gaagtcattt ggctggccaa ccaaaacaga 60
tctgtgaac aaaaggcctc cctactggaa tccagaaaca tctgtgtttt tatggtcagg 120
tctatagatg ttgaagccag gtcccacgag ttgggtatgg ctgtcaccct gaagataccg 180
cagatcgcca acatcacatt cccagtcctc catctagtgg cctccagtgg cccatctact 240
gggccagcag gggccaggaa aggagaagag ggagaccagt ggggctgaag gcaactgtgc 300
gtctgtgcaa gaggaggaag ccctgtgaga gggcagcagc ctccggactg gtacaaagcg 360
attcttctgc ctcaacctn cgagtagctg ggattacagc aaaaaataaa attattgct 420
tatcttcaaa 430

<210> 360

<211> 194

<212> DNA

<213> Homo sapiens

<400> 360

gaggaccgga ggaagaacca agagaagaca agaactgaag ttcttcatt cccacctctg 60
catcaccttc cctgctttct ctttcccag aagagactca gtcaacatcc caaagaccaa 120
tgatttcatt gttttacacc aaatatccct cctctaaatt ttcaagaaa ttgggaataa 180
acttcttacg caag 194

<210> 361

<211> 454

<212> DNA

<213> Homo sapiens

<400> 361

atggaaaaag aatcgcaaat aagcataatg tgaagagcat gagctttgga ataagcaagc 60
ctggaattac aattttctt tattagctct gtggctgtaa cactcaactt ttgcaagctt 120
cagtttcctc gtctgtgaaa tggaataata gcacttacct cattggctgt tgtatggatt 180
aaatgagacc atgactatgg atgtatggca ttgtgtaccc aataaccct caataatcgg 240
cagctataat tattcataat aataatgggt gtagcaacaa acccagccca aacatctgaa 300
ggaccgatca ctaaaaagaa gatgaactca gtctacgta gtaacaagaa tgtganatct 360
atgttggtgc caaaagtctg gangagttgc caggaccaga aaaaaaggan ggggtgangn 420
ccgcttgaa naagganggg acagatgtca aggg 454

<210> 362

<211> 273

<212> DNA

<213> Homo sapiens

<400> 362

actcaatta gtctccgcaa tgcagtcaag cagatctcat gaagatataa atctcacagc 60
cttctctaaa acttctccca ctgatatctg ggatcctgag gcaagagtga cagaggcaac 120
tactcagaaa tcaggatcca tgatcaaagg agcaacagca gtgtcaacca agaattgttt 180
tttagcaaat ctctctacac actcccccta ttctccagcc atggcagttt ttaaccttc 240
cagaatacaa taaagcctct gtgattctg gct 273

<210> 363

<211> 387

<212> DNA

<213> Homo sapiens

<400> 363

gaaaactgct gcagagtgg agtcttctaa atggattaag aagcctatct caatccctct 60
ggagagtctt ctcaattca caatgaagat gttgaagagc agggacagac atcaacactc 120
ctctccccac ctccccact ggcagaggca ttcagggtcac tactagtgtc tcttttctc 180
tttccccctt ctcttaatct ctactgccc ttcttccat gtcatattct cttttctcc 240
ttccctctct tctttcttac ctactaaact cnatatgtac caaaatcagt caaagctcta 300
ctatctagct ctctttatct agactaaagg gagttgtcca cctcttggtc tagataacac 360
ttgcaataaa agacctgctc gtttccc 387

<210> 364

<211> 101

<212> DNA

<213> Homo sapiens

<400> 364

gctgagatct gcaaacctct gggctctcaag agatgaaggc tacattagcc aactaagacg 60
acaaactcaa ctcttccttg tcattaaata atttgccagt t 101

<210> 365

<211> 443

<212> DNA

<213> Homo sapiens

<400> 365

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aaaacccgga gagagggttg aaacaagggtc acgacctaat gctcctcagc cgtgcaggcc 60
aatgctttgt ggcgtcatca gctgccacc gtgagctggt caccacttg agtccagtc 120
ccccggcac cncctgccta gtggataata tcatacctca cttccagca gagaaaccga 180
gctgcagaag ttgaatgaag gtctctaggg atgctcttgg gtccatcatt cattatgtga 240
aatatgaaag gcctcaacca tatgttccca agccccctggg ttgctgactg gcaagaggag 300
agaagccact ccaccaagct gaaacagtac ctgtccctca cggtaggggag ctgaggcagc 360
cagcaaccag tcaattttg caggaccaga agcaccatta gaggccttgc ttgctgattc 420
attccatac ctcgttgatc tcc 443
```

<210> 366

<211> 213

<212> DNA

<213> Homo sapiens

<400> 366

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aggagaaagc tgaagcacia gatggttaa aggactgttc aagacagcct tgcaatttg 60
accaaggaag aaagctgaag agtgctaggg caagagagga actacgtcca gaacaattca 120
taattccaaa ttctcacttc catgatttca atgtgtaatg tgtacttctc tagctaaaaa 180
tacaattgct taagtaaaat catcattatt tac 213
```

<210> 367

<211> 261

<212> DNA

<213> Homo sapiens

<400> 367

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gctctacttc tccaaaagac gttacatatt ccaaggatcc tgcgtctcaa caaaccttt 60
cttctgcaa agaacagcct gctttattc caagctctga gattccttat aggaagctgt 120
ttctctccag ttatgccatg ttatgcctta acctgggcca acagtgccta cacacggaga 180
atgcaatggt tgaggccaat tcattaacag ggattgttta gccacatccg ttgttaattg 240
acaacatgtc tatggaatta g 261
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<210> 368

<211> 455

<212> DNA

<213> Homo sapiens

<400> 368

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ccatccccga caaggtacca gacatatgag tgaagaatca tggacctcc agtccacccc 60
atccaccagc tgaagaccat gagtaacctg ggccacatgg agcagaatac ccagctatgc 120
cctgcccag tccttggtc gcaaactcat taggacttgg attgatggac tctctagcct 180
gagactgagg cctccttct aatgaatggg gcagaaccaa gcacctcaa cctcatatga 240
agagcagtca aagaaagttt aaagcaaaat gaccataggg ggagggcagg ttgtgtgca 300
```


gagatggccc tgaagaagag tgctgccatg gcaacacaaa gacagcagac aggctcatgc 360
 acttggcacc agtgggggtc taataaatgt ttgggggagg catggagatg gcatgtcttg 420
 cctgagtcaa caatcagaaa aaaaaaaagg gccgg 455

<210> 369
 <211> 192
 <212> DNA
 <213> Homo sapiens

<400> 369
 gaacccttgt catccagaat ttcccaaagg atggtttgca gaacaccagt ctcaacagaa 60
 aaatctgttg aagaagtgcc ctgtgatctg gcctatttgg aatactccat ccatcttttg 120
 gaaaattaaa atatttatgg tcaagttaaa ggcgctgaga agtctgcag taaataaacc 180
 tgtatttact tg 192

<210> 370
 <211> 235
 <212> DNA
 <213> Homo sapiens

<400> 370
 gattaatgaa aataaaacgc agacettata agcagacgct gtgattttgt aataaagagg 60
 ggcagctttt acaggaaaaa gaacccgagg gaagctgttg gcagtctgtg aaacgatggt 120
 catggtggaa ttcgttttgc tgcacattag atgttataaa cagctgnaaa aaagaaaaaa 180
 aggccagcga ggccaattca gcttggaact aaccaggctg aacttgctca aaagg 235

<210> 371
 <211> 137
 <212> DNA
 <213> Homo sapiens

<400> 371
 agtctagaaa atatgaattt acaaccacag agaagtgaag acagtctccc agattctcac 60
 cccgtgtaat tgaaagtgat tgttgaacat tgctgatgaa gacaaaccgc tatgtaataa 120
 actgaataat aacttag 137

<210> 372
 <211> 186
 <212> DNA
 <213> Homo sapiens

<400> 372
 atttaaggat tcaatatgga ctgcctcaaa tataaaggga cacatttgc acatggtcca 60
 gagacttggt ttcttggccc agaattctct tgcctatca attgttgga agacactgcc 120
 tgcatttgcc cttttgctc tcctgttct gtacttgcac tatcaaataa aaacaattc 180
 taatgg 186

<210> 373
 <211> 163
 <212> DNA
 <213> Homo sapiens

<400> 373
 atttgaact ggggacccc tggaagaatc gtctggaaat tacgaccttc atctggcgat 60
 tgcagctgtt aaagtctcca aagaggccat tcttacattg tgtgtgaaa ttattactct 120
 atctcaaatc tgtgccagaa agaaaataaa atgtgtgttt atg 163

<210> 374
 <211> 64
 <212> DNA
 <213> Homo sapiens

<400> 374
 gtatcatcga aacaggaatt ccctgacttc agtaatgagt attataaat aaatcactat 60
 aaac 64

<210> 375
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 375
 aaatcacttg caaggaagat tcagttaccc actgctacac tagaaagtta ggcttctctt 60
 gcggcatttc acagtgaatc ccttcatcaa cacctggatc ttacaaaatg aagtacctca 120
 gcaagctatg aagagaaagg gtgttctacc cccttctact ttctgccacc tcaccacaat 180
 aaccaatcct atcatcatca tcacaactgg ctcttcata cctttaaggt cccttcaaag 240
 aggacatcct tgaccacttc ccctaaaata tatatccctt tccatgagtg tgetctctca 300
 gcaacctttc tctcagcaat aaaattaatg tatcatt 337

<210> 376
 <211> 62
 <212> DNA
 <213> Homo sapiens

<400> 376
 aaatcatgcc caagttcaaa caacgaagac gaaagctaaa agccaaagcc gaaagattat 60
 tc 62

<210> 377
 <211> 170
 <212> DNA
 <213> Homo sapiens

<400> 377

attggagagg atgaaggccc tgagggtccaa gaacatggaa acctgacagt ggacgccaac 60
 agctgtggag agaagccggg cgacagctgt ggagagaagc cgggcgatat gctcacgctt 120
 ccgtgtgccc agcaatcctg ctttatctt ttaaataaag gtgattcctg 170

<210> 378
 <211> 313
 <212> DNA
 <213> Homo sapiens

<400> 378
 cacctaaagc agtgactggt gcatgacagc tatggaagaa atgcgtagga taaatgcatg 60
 aaagacagga agagaaaaag ccaactgggc acaggggtcaa aaactatgaa tgaagagagc 120
 accacctaaa agactgcttt gcagaatcaa atgccacaga gaagcaaggt aaaatcaggg 180
 gtgaaaaaag aaccgcctgt gtccactggt cacttttgc ctcattgttc catggcataa 240
 taagaattta acagatgcat ttcgatggat acaaagaaga cattctgggt taataaataa 300
 cttttgtaat atg 313

<210> 379
 <211> 223
 <212> DNA
 <213> Homo sapiens

<400> 379
 gcagtgttgt aagcacgggg acagagacgt acgtgagcag atggaacccc cgaagacctg 60
 cagctgtcat cctgggactg tgtgcccggc actgtgctaa atgctccctg gggcatctcg 120
 tgtaaccttt gcaggaaccc taaaaacgac gatcagatta gctcctcct cttgaaaatg 180
 gagacaaaat tcaataaca taaacttcac cactttaacc att 223

<210> 380
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 380
 atatgagggt gttgtatcct aggaagaat gtcagcctct tgcattccct acaattggtg 60
 agagaagccc tgacctcaat agcatgagaa gacctggatt ctgatcgag ctccactagc 120
 agcctgctct cctgactccc cagtgatcat ttctcctgtg tactctgggg ctgataccta 180
 ccctgtctc ctgctttgcc ctgaggact ttagatgagc aaaatgcaag agacattcct 240
 atgaaagtga tagattgtag aggtaatgaa gcttctcttg tgaatatgtg attgtctctt 300
 ctctcttg tgatctgag acgtgaaca gagtaactgg tacgtagcaa taattcctca 360
 tatttttgca attctgggga aggaggagga agaggatgat gatatgaaaa cgggaaaaag 420
 agagaggtga tccctatggt gggt 444

<210> 381
 <211> 403
 <212> DNA
 <213> Homo sapiens

<400> 381

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ggtcttgctg tgtccctagg ctggagtgcg gtggtgcagt ctcaattatg ccagatggct 60
ctgagggtcca agtaaaagat aatatgtgca accaaatcac tggagttgac catcaaaact 120
ctttccagg tggaaaagca ccctgaatcc agcttccctgc tatgaatgaa tactgagctt 180
gggttggtgg aaattgatt tcgagataaa gaatccagcc aggactgtga agccccaggg 240
aatggctgca ctcaagtca gaaggagcct gggtcctga atcatcatgt ggaaggctct 300
ccaccagtt caatggtgca atggaccaca agcaggaact taatttaaaa atgtgcttat 360
ttttggtaga tttgttaatt aaaaaatgaa tccactctg ctg 403
```

<210> 382

<211> 379

<212> DNA

<213> Homo sapiens

<400> 382

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gcactacaag caaatgccaa atacagggaa agtcaactag atggcagcac aagggaatg 60
atccctcagt cattccgggc ttcacaaggg aggatcaggt caacaatttc ccagcactct 120
ctgaggatac ggaagggctc agaactctc ctctccacc tctagggct cttccttaa 180
attttgtaat ctgcatcaca tcatattgca gggatgtgct aagaacata cagacatgaa 240
caccgaaca agaggaagct gaacaaaaat aactccatc gtacctagaa aaaaaaactt 300
ctactatatt ttatataaca gcagaagtct attccatctt ctcttctgct ttaaaaaataa 360
aataatcatt ttccaatcc 379
```

<210> 383

<211> 448

<212> DNA

<213> Homo sapiens

<400> 383

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cagaaaactga ggttatttgg atgaaatgct tatttcttt ttaacataag cattgactgg 60
aaatatttgt tattctgtct gatattacat gaaggtcaga tgcctccat gcaaccatga 120
ggtcggatgg cagtttgatg ctgaaccagc aaacaagcct actcagcatg agactatgag 180
tataaaaacc ttatgatga cctacctca ctggatcaa tgaagagaat aagagtggg 240
gacataaaca cattcaggag agaangaang acccatgttg atagtcacag ggaagaaaga 300
acagctcanc ctaacattac ccaagggcnn tagaaggcct gtacaaanaa ataccanccc 360
ctgantggac cnnctfntg atcctttggn acctccag gcttcccag aantacaag 420
ggaaaaaatt anaaatttc ccggtttg 448
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<210> 384

<211> 278

<212> DNA

<213> Homo sapiens

<400> 384

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gcaggaagag tcctcagca gctattccag cccagtgag aaaccagaaa agatgctgag 60
acgttatgag acagtgaaga ccgggatcta tcattggact aacacagcaa tcactntaa 120
catgcagaga ggagaggaag acttgttca tctattcat gttgcaggga gacgccaccg 180
```

atttgagttt caaattatgg cataatagct catttatgca aatcataaac aagattatat 240
aatgttgttg tgaatgaaat atacacacca atctaggt 278

<210> 385
<211> 162
<212> DNA
<213> Homo sapiens

<400> 385
tgcaaagtaa atgatggcag tgcctacgt gacagcaggg caacaagata gaaggaacct 60
ntcaccgaat gaccatgcag agcaaagtta ctcatcaggc aatgactact cataccagga 120
ttgctacatg agcagtaaata aaacttctt gttattgag cc 162

<210> 386
<211> 447
<212> DNA
<213> Homo sapiens

<400> 386
ggcctcacca agagtcttgg cgtgaaggcc gacaatgcat atcctgccag gccagaagac 60
aggaaaaata taaacaccag tgatagagac aggaggcagc caaggacccc tctgcccc 120
aacacctgac gaaatgccgc cttcaagcct aaaacagcat gagggatgaa aaaccagact 180
gccggtccgg atgaagccca ccttttccc caaatgattc tttctgaata acgcccactt 240
gcacattggg aggaggggggt ggggccttgg gaagtttga ctgtttgcag gggggaggag 300
cctgtgtctc ctctgttctg tgtggttaagg tgggatttaa tccttgagat ggagagcctg 360
ttagcaggac tcttatctca ctttctgat gcgtatttcc ttttcattt ctgcctaata 420
aattccactt gtcacccttc aaaaaaa 447

<210> 387
<211> 303
<212> DNA
<213> Homo sapiens

<400> 387
gcatagggat ttccagcttt acaacatgct atgaattatc ctctctgtg ttaacacttg 60
tgttaacctc atccgaagtc ctgggggatg tctgttcaa cctgccattt caccatagt 120
agagttggtc cacagtgaag agtggtgaaa agactgaagt ctttatacca ctngcatata 180
ttgttctga tctgcgtgt acatttcaga gaactggtga ataaactctc cgctccatgc 240
ctttctgctc agagagggtta catcttatat tctccaaatt taaattaaaa ttagcttcc 300
ttc 303

<210> 388
<211> 442
<212> DNA
<213> Homo sapiens

<400> 388

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ccgatcgaat gcctgctgca ctgctgaaga ggaacagag tcgtggcctc cgggaggggg 60
ctcaaacctg tgactggtgc atgttcgcca ttagacacac tggctggtga ccagcagccc 120
cacctacaga attccctgga atgaggaatg gcattcctga gaccactcag cagagactac 180
ctcaaaaggc gctgctcaat gccaggaaat gcagcgagag aaaatcccct tccggtgcca 240
cctctgtggc cagcacacag gtccccctgt cagcgggtgt gtgtagacgt gccctcagga 300
agctcagccc aaggccctct ggaagtggcc acagctggac cacacggaac tcattccactg 360
cttctttgga gctccaggaa agcgccagaa gangggcact gaggcagang gaaagctaag 420
cagcctgtgg ctcaaacat ac 442

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<210> 389
 <211> 111
 <212> DNA
 <213> Homo sapiens

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<400> 389
gtgaacattc ctgaggaact gaaatatgaa atctgtcaag tcacatacag agatcctgta 60
gatcattcaa ctgcccattc caaatcatcc aataaaatat gatgcttctc t 111

```

<210> 390
 <211> 447
 <212> DNA
 <213> Homo sapiens

```

<400> 390
gcataactaat aagcccaggg aagaagagtc agaccagtg ccagcgcagg ggaaacgcat 60
ctaattcaga acagcagaca cagtcctct cccatggaac acccagagca gacattgcca 120
gtcgatcca gcacccttc cccgggagcc tgggtcagc ctcaagactt tgctccgct 180
tcacaaagct ctgcacagcc agttctcatc aattggagt ggtccaaaat atggaaactc 240
ttgtcttgc ctgacccaaa ccattcctct ttccataac aattctgaca tttaaaaaca 300
gcagaattcc ccaacactca tccccgggaa aagaaattg gcattgttg tactttcaac 360
tcctgacctt ggtcaagctg ttgagtcaac ttgtggtga gtctgagccc catttctgca 420
gacagaaaga ccgcatttgc gtttttg 447

```

<210> 391
 <211> 336
 <212> DNA
 <213> Homo sapiens

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<400> 391
agttagactg gctgagcaac ccaagctttt gtgttgatc cataacgtcc ctgagccaac 60
aaactgaagc agctccagcc catgtttctg aagggttacc gctgacaagt ggcaagtaca 120
tgacacagtt agtgcctgta attaggccaa gagggaaatg gcatcattgt gattctcgag 180
taactttact agcctcatta gtaaccttta gaacatcata attcaggagt catctgaaat 240
cagagtcttc agatgaaagt gacactaaca aaaagctcaa acaacaagt agaaaaaaga 300
agaaagagaa aaagaaaaaa agggagcatc agcatc 336

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<210> 392

<211> 76
<212> DNA
<213> Homo sapiens

<400> 392
taaccagtga ggaactgagg tctccagca accacctgtg tgaagttgga agcggcgctc 60
tctctctctc tctctc 76

<210> 393
<211> 443
<212> DNA
<213> Homo sapiens

<400> 393
gggtctctac tcagaatgcc ctccctctaa caaggagata attggagaca cagccggctc 60
tgggctgtct ctgagttgaa agaggcacca aggaaccttc aacttcaccc tcacctcag 120
gaaatgggaa ttgttcttcc ccagtttcca aagaggagaa gcagcccttc ctactggga 180
catgatatta tgttcatcac taggacctgg gccctgtgtc cagctctgcc attagacctt 240
aacctctgtg ctccacatat gtccaacgag catgagatta tccaccccat tatgcatagg 300
atgtgcagta ggcagaattc taagatcgcc ccatgacctc tgccccctgg tgttactgtc 360
atgattatgt tatgttccat tgcaaaaggg atttgcctt tgcccatgta attaccgtta 420
ttaatcagtt gaacttaaaa ttt 443

<210> 394
<211> 439
<212> DNA
<213> Homo sapiens

<400> 394
cttttcattt aatctgtac ctaatatggg acgtggcag cggcagagag ccagaccgac 60
cttctaaaac caagactaca gaccacacac atagccttga agatccgtga acttctttat 120
aaaggggtgaa gtttcatcaa actaaggaat gaaggggaaag gaaagaataa agaaagaaca 180
atgctttttg ttcccgagt attctttttg ttactacaa ggtggcaatc agatatctgt 240
agcaagcttg gatcagtgac gtctgagata cctgtttatg gattattcat ctgttctaca 300
taatgacatc tccacctcca gacaaaaatt tcatagtatg attgtagatt cactgtgctc 360
ttatctgtat gcagaagaat gggaattggg acccttgcca cacactgtg aaaggaaaat 420
aaatctttgg ggtcccaaa 439

<210> 395
<211> 446
<212> DNA
<213> Homo sapiens

<400> 395
gtggcatgtg gacangcagt tggaaagaga aagtacagaa agaagttaaa agtatgctag 60
aaaaaacagt aagtgaagaa atgacagagg tgccaaagcc aggtgaagtg aagaggtatc 120
atgaggcaga agtgtcttcc tactctgagc gggatcccg gaccagcagc atcagcattc 180

cctgagcctc atcccagacc gacagaatct gcattctgcat gtaaaaaaga ttcccgggta 240
 atttgcaagg atattgaagt ttgagatgct gtggtggtgt ggtttaaacg ttgaggtctg 300
 gaattagaag gcccatcca agtatctgtg cctctcatta gctatgtggc cttgtacaag 360
 ttattatatt ttccaccct aataggtaga gatgaatcta tgctaaacac ttagaaaatg 420
 cctggcaaat aatactatca ttcttt 446

<210> 396
 <211> 221
 <212> DNA
 <213> Homo sapiens

<400> 396
 aagaggaaac tgaggctaag agattgaggc actcatccac tggcaagtcc cagcccagca 60
 ggactgcaga ggatcaagac ttataagaaa accttctaa caccagtgc tgccttggtt 120
 ttccagcgca aatcatactc aggaagacaa acatccaacg tcactctctg cttcttgggc 180
 ccggaagaat gttataaaaa taagtaactc atgaagaaaa c 221

<210> 397
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 397
 gcctgcacta tgtactgcta agtcaatttg tggatttaag tagcagggtca attctatcaa 60
 atgtctgtgg gtcactgaat aaattgagga caatggcgac aggaaagcta cctctgacct 120
 tgacaaagca gtttcaatgg agtaggggtcc atgagcagac gagcagatga acagatgtac 180
 agaagagcag agaggcagag aagcagctca gcagagaagg agagaagaga agagtctgaa 240
 cgtcgagagg agttcagctg gagacagcca gagaggaggt cagctgtgga acagccaaac 300
 tccagaggaa gatcatcttc cactccatc cctttccag tccccaccc gtcccattaa 360
 gagccaactc catcatccaa taaaatcccc atattcacta tc 402

<210> 398
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 398
 ctatgaccac gaaggccgcc tgaccaacgt gacgcgcccc acgggggtgg taaccagtct 60
 gcaccgggaa atggagaaat ctattaccat tgacattgag aactccaacc gtgatgatga 120
 cgtcactgtc ataccaacc tctcttcagt agaggcctcc tacacagtgg tacaagatca 180
 agttcggaac agctaccage tctgtaataa tggtagcctg aggggtgatgt atgctaattg 240
 gatgggtatc agttccaca gcgagcccca tgcctagcg ggcaccatca cccccacat 300
 tggacgtgc aacatctccc tgcctatgga gaatggctta aactccattg agtggcgctt 360
 aagaaaggaa cagattaaag gcaaagtcac catctttggc aggaagctcc gggtttaaga 420
 atgatgggtg gccttc 437

<210> 399

<211> 132
<212> DNA
<213> Homo sapiens

<400> 399
acatgatatc tggagatgca agaatgcaac aacctatctg ccaccaaag aagaaaaga 60
tgagaacaaa agtccaagt ctaaggatgc cctttcacg ttctgtgaat taagaagaaa 120
agaaaagaaa ag 132

<210> 400
<211> 260
<212> DNA
<213> Homo sapiens

<400> 400
gccctgggaa gattacgtag ccaacactgg tgtgaaaatc atgcctatgg agggttcttt 60
tggaaccag aagaacaga taaaggaggt gttattcat gaaaccagca cttagaagac 120
tgcacagca gtccagctc catgattaca agctcctcga agacatggac cagatcacac 180
ctctcctgtg tggtaaggc caactgcaca tgtagaacgg tgttccttct atgcttggga 240
caaataaatc tcacaaaatc 260

<210> 401
<211> 292
<212> DNA
<213> Homo sapiens

<400> 401
cacagaaaag ttaagactct tcagtgggac ctgctctggc cagtgaaatg gaaaagaaag 60
tgacatgtat cacctctagt ggaaactcta agagccagt caccatttac cgaattttat 120
ttctgcctt ggcaatttg gatgaatttc catcagccta agtacctgag caagcccttc 180
tacagacctc tactagacat gtagcataaa ggagaagcaa acttttgta tattgagtga 240
gacgtatcat ccattctaata aaaaaaatca taataaaacc ttctaaaaga tc 292

<210> 402
<211> 194
<212> DNA
<213> Homo sapiens

<400> 402
gacagcactt ggtggtgta cattgatagc ctgaaatcag ccacgtgag agtatttaca 60
ctacaaatca acaaacatta tacatcagag gttttattga ttgttgact gtctagacca 120
gggatgagca aactacaagc aaatctggct taccacgtg tttgtaaat aaagttttat 180
tggaacacag ccac 194

<210> 403
<211> 294
<212> DNA

<213> Homo sapiens

<400> 403

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acaagatatt gctgagatgt tgcccagatt ggtctcaagc tcccaagttc aagcaatcct    60
ctgaatcctc tggcctcagc cttccaagta actgagatta caggcatgtg tcatgggtgcc    120
caatttatca atgcgatgtg tctacaagtg gagtggcaca ttcaaatatt tgttgctgtt    180
gtcatttgtc cattcatttg ttgactcagt agcattaact gagtgtctat tccaatgtgc    240
agacactatg ccaggtgctc ggggtggaagg aggaataaaa ataatggtca taat        294
```

<210> 404

<211> 347

<212> DNA

<213> Homo sapiens

<400> 404

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gtttcttttt attgaagctt gaagctcaag ttcatggctt catcaaaaga cgttcaaat    60
cctgaagttg agatagctct cacctggagc ccgtgtgttg ttctaccctt tggtgggaa    120
cacagtcacc tgggaatcat tccagcaggt ggcttcaaaa gtccaacctg ctagggtgaa    180
atctgacact gacacagact ccgggagctg ccgcggaaaag ctcaaccagg aaccgggaaa    240
tgcacaagcc tcttgatgca taaaacagc tgggtccctt tggagacaga gcgcatggg    300
aaaccgggtc tgtcgggag gaagctggag ctgccatcaa cttttc        347
```

<210> 405

<211> 428

<212> DNA

<213> Homo sapiens

<400> 405

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ccaaaggaag catatacccc tggcaaaact gaccagcacc tgaacactgc cccaacagag    60
aactcaccag aagacccttg agtcgggaat tcttctctgt gggtagaact tggataaac    120
aagtaagcca agcaaggaac ttaccacaca gcccagttaa caacaggatg cccatgagaa    180
cccctgaccg gactcagctc cctaaccctg tccacaaatg gcccgggctc tgtgccaatg    240
actaatctcc aaagtattca gtgaagcgtc tgctccattc gggattttt cagatgggca    300
ttttggtttc atcaagccct gctttctccc gtccgtgac ttgcatcag ttgtcatgag    360
gatgattaaa taatttagca cttaaccccc tgctgtactc ctggcctgg atcatgacca    420
caccgaaa                                428
```

<210> 406

<211> 299

<212> DNA

<213> Homo sapiens

<400> 406

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cctgcattaa acgagactga gggtnagcca gctctccagg gatctctcag ccngggcgga    60
cagaaatgga tacccaatgt tacttgcttg gccccctgac ctgatgggag tatgacctac    120
tgggcagagc tcagctcagc tacccaaga agtaaacagc acagagggaa agataaacct    180
tccaggcttt ccgaaagcaa ttatcatgtg tggttatcga aaattgtat tcaatatccc    240
```

gggggaagga agcagagata caaataaacc cagaattgat attgcctgg ggataaatt 299

<210> 407

<211> 418

<212> DNA

<213> Homo sapiens

<400> 407

atgataacaa aggcctcaaga agattaagga atcggcagat gtgggatgtg caatttcctt 60
atggctcggg agatgatcaa gttaaacagg cacgctatta tgaaaaacca ccaataaaat 120
gggagaaaga cataactgct gctgtatgtg gagactgcac ctcagcctta attgacttg 180
ccgagcaaga acaaattggac agcacaccgg gtgcttgtt agttaccgcg gcacatgatt 240
atgaggttcc cagaaggcat cttcttcaca tgtgagatca ctcagacttc agcacttggc 300
aatcagatac aaacatgtgc aagtgaact agaaattgtt tgaaaaagct aatgatcttg 360
ctctagattt ttttttttaa tnaaaaaact tntngntcc aacngaatg gaataaat 418

<210> 408

<211> 435

<212> DNA

<213> Homo sapiens

<400> 408

gtccgccaac catccccga tccggccgtg ttaacttcc ttgccagtc gtgatacccc 60
gtcagatttc tggcgtgcc acgccgccg cctgggctcc ttctgggctc ttatcaacct 120
ctcccagtc gctcggccc ccacagctgt tccaggccct cagccctca ctttatctgc 180
tcgcacagac ctggcctgg caagcgggtg gctcggcgcc tctccacat accccaggaa 240
gccagctggg aacacagccg cctgctccc ggaccctctg agagttcatt accagccagg 300
gtacccagc ccgtcagcca aggtgcgggc cgcgtgccg agcccggccg ccggagccgc 360
ctggatcatt aaaactncac cctnttgaga gaaaaagaa aaaaaccccc nctttaatt 420
ntaaaaggct ttggg 435

<210> 409

<211> 399

<212> DNA

<213> Homo sapiens

<400> 409

agtaatgtgc ctagaaggag acagtgcac gaagcaagt tactctcagc atgtcaagaa 60
aacattaaaa tattatttc ctgatgatt cattggacac atttgtgaa atacatgagt 120
ccctcctacc tgggatgtca agagactgct ctttctgtg gagaatggac tgatctttg 180
catcagtcac acgtctgtt tggggagcca ttttgatac aatatatgta ttgcttcctt 240
taaatgggaa ataaccatgg tctgtcaaca aataatcttg ttgataaat ctgaccaga 300
tggtgtgcta ggttgcaaaa ccgtcttctt ctgctttgga aaaactcagc tctgtccctt 360
catcccttc tctgccacca gcctctgtcc accccaag 399

<210> 410

<211> 79

<212> DNA

<213> Homo sapiens

<400> 410

aaaaagtctc cctctggagg acaccaaact gtcacnggcc cgcttctatn actccctanc 60
cagnanggta aggtcagcc 79

<210> 411

<211> 393

<212> DNA

<213> Homo sapiens

<400> 411

gaaggcataa aacggattca cgtataaagt tattgcctcc ctgagttcct ggtgctgtgt 60
taagtgtctg aagtatgaag gcaaatggaa gtgagatttg ttctgtcct gcaagaactg 120
tgagccagga aagtagctta gaagtgacca atatgtcaag gtcccatgag aagactgaaa 180
aaaagagaag aaagaggaaa gaaaagaatg acaagaaaaga gaaagaaaaga aaccaatatg 240
ctctttgttc ttgtttttg ctctctcaag cttttctctg tctacaaage caacctctcc 300
tgctcagctc atcagaacat tcaactccact ttctggaatg aggtgttgcc tgatcctaga 360
agtcgaata aagcccactg agatcgtaaa act 393

<210> 412

<211> 325

<212> DNA

<213> Homo sapiens

<400> 412

ggtctccctc tgttgcccag cctggagtgc agtagcatga ttccagctca ccgcaacctt 60
gaccttctgg ggctcaagtc atcgagatta caggcatgca ctaccacatg cctgatgtga 120
gtgaaaaat ttctattgcc tggtagatc atagtcattg taacaggtgt tgggtgtaaag 180
acagacctac agatgaatga aacagaacaa aaaatcccca aatagaaccg taaatgtatg 240
ccaattgatt ttgacaatg gtgtgagggc aattcatgga agatatgtat aagaaaataa 300
ttaaataaac ctgtctcaat ccatg 325

<210> 413

<211> 209

<212> DNA

<213> Homo sapiens

<400> 413

ggacgttcta acataccgga aagtgtggca tcaactacct tgaaattgga caaatcagc 60
tttgagggtg ctaagctaac taaatccatt ccaatggaag ccagcccaca ttgcagctgc 120
tgaagaagct accctgactg tacccaaaca ctcaagcaaa cgctttctgg ctgactaaac 180
tgaacagtat aagaaaccag ggtgagcac 209

<210> 414

<211> 444

<212> DNA

<213> Homo sapiens

<400> 414

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tagtgtctcc aacaccatct tgaagggtgca gtagcttgca tatagtaggt gcttgatatt    60
taccaagtac ccctgtgggt caggccctac tctcacccta aggatacagc aggaagcaaa    120
gcagaggtgg agaagatccc actaaacaca caggccgctt ggaatgttgg gccatctgtc    180
cttttgacat gaattttccc tgtaattgggg gtagagctgg taactgttgg atcatttgat    240
tattggagac agaagtctg tcaactgccc ctgctgttag gaggtgggct tcctgaatgg    300
ctttctgtat acatgaagaa ttcaagacc ttccgttaag gggggcaaga gctaaagttt    360
cagcgtttac aaagaagnct ctggctgac ttgctataa ctacagcac ctgacgtttg    420
gacacctttt ctttttttgg tttt                                     444
```

<210> 415

<211> 558

<212> DNA

<213> Homo sapiens

<400> 415

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acactcaagt ttccacaca tgactggatg gccctggcca cactgggaac ggaatggggg    60
cctcccattg gaactcaggg tggaggggga agctcgacca gctattgtgg ccccacttc    120
cattgacaaa atgtgttgtt gagacttgct ctggatgct gtcaggaaat atcatctgac    180
tgcgtttgct accctggggg agacaaacaa aacttgagtg aaggaaaatg agaactcacc    240
tgaaaccaag aagagctttt ggaaaaggat tttgtggac ctcatcaaat aaccaggaaa    300
gattaatcac ctgagaagag aagagactgg gaatcttcac cctgcccaaga cagacttttc    360
atctattctc ctgagagcag ctacaagaga ttacctgtgg gactcaattt gcataataag    420
atganctttg tttctgggca agtccacccc ccantttcc ataatgnctg gctnccacct    480
nccaggngca ttatttttnc ctaatgactt actgctccta aaanaaagnn tacctttcca    540
ttctctctc ctatggaa                                     558
```

<210> 416

<211> 232

<212> DNA

<213> Homo sapiens

<400> 416

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gggaatgaag aaaagaagaa gacaaaaatg aagacaaaga aggagaagga ggagaaagag    60
gaacggagac ggagagaaaag agagactgat ctggactcat atcgccctgga tcttgaaccc    120
tgactttttg ctgttattgt tgtctatat gacattgac atattagtaa atttctgtg    180
cttcatttc ctcatctgta atgtgagaat aaaaatagta atgctgcttt tg                232
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<210> 417

<211> 404

<212> DNA

<213> Homo sapiens

<400> 417

caaattgcag agaatccata catgtaagga cctgtcacta actgattgtg ccaactggagc 60
 tccatggaac ccatacataa agcacacctc ttctcttctc cttggcatcc aacctgctgg 120
 ctctacaact actttcaaca atgagtcaag gctgtacctg gcaagatgga aattcaaaa 180
 caacaacgaa agctatttat ttgggtttg atcctagccc tgggcctttt actaagtatt 240
 cagaactgat ttaatgaatg aaaaaatgaa tgaatggtat acatttccat tgtctattct 300
 gcttcttttc cctaggggaa tgtgttaggc catgatttcc ttgctggtt ttcatatgg 360
 gtgggtttat ggcacacgct taaattaaat cactagtcc attc 404

<210> 418

<211> 443

<212> DNA

<213> Homo sapiens

<400> 418

aaagttgaaa gtagctgata tgggaccaca gaattattggc caatcagcat tgtcttaatt 60
 gaggtcttac ttaaggaaa cctgatccca gaaaatgcct aaaacaaaa cagagagtat 120
 gtggcacttt ttaattttt cctggaatca gtggtcataa cccagtttac tgtttgtgtg 180
 attctaaaat tctggattgt ggattgttcc ttccaaaatc tgctacttgt ttgctgcatt 240
 caattggaac ttaaaataga ttttaaattcc atcctggtaa ttccagaatc attcatttcc 300
 tgtccatctc gtcacttatt ggccaagttt ccagtcttaa cactgctcta ctggagtaaa 360
 agggaaacctn atgggtttgg ccanaggggg aatttagggc cttacagctt atgaacctat 420
 agggggggng gatttataag gca 443

<210> 419

<211> 971

<212> DNA

<213> Homo sapiens

<400> 419

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 actgctcacc gtagatgcac ttctcttggg atcttttgtt ggctgtctcg tttgggacgc 180
 anacatggaa ccacaanacc ttagctgtat ccccttctat ggtttctct tcgaagtacc 240
 ttgcacctct aggacacaca catgggggaca acgatttctt acaaacacca cattatcttt 300
 tanatatttc naggtgtcna anaggaaaat gggatacgaa nagggccctt gcatgggacg 360
 acaccgaaa agnncgcaan angacccaaa ntacggccna ttggccccc cttggttnga 420
 annntttng ncaacnccct taattaacgn acccccnca ggaancgggg gcccnttgga 480
 aaaanattnt accttanan tacgnaaaa nccnccnaa acacacetta naggaagnc 540
 atagtaattg gncctccctt ttactcccc ccatctccc tnttantact ttgggattg 600
 ggaentatt ntcccccat cgccaatcga aaagaggcgg aaaagggttg ncttattana 660
 ctnggggggg cccgggggtc ncctttttg gccccgttt aanaaagngg ggaatgggga 720
 accggtttt aaccccttt gggttgggga aaagggnaaa nngggaaatt ttncctntt 780
 ggggcccttt ccaattttnc ctnggggaa tttcnggaa aaaaaaacc aacccccggg 840
 ccccaacctt tggaaaagcc caacccctt ttgggnggg aaaccccccc cccaaactt 900
 tccctttggg ggcnccggcc cccaaggaaa gaaaaacca aaanccccc cncnccctt 960
 ttttgggac c 971

<210> 420
 <211> 307
 <212> DNA
 <213> Homo sapiens

<400> 420
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 tctgtctg acaccacctg gctcccagg cctntgggca gctgtggctg tgcagcccct 120
 gctttcacc tgtctcctgt cctggagtgc tcgntgcac ttcagtgtgt tagttgcacc 180
 actccttaa gagaggctca tgccttacct tatccctca atgactgtct tattttgta 240
 tgcccctaag agcagagcat ggggctagag tggcaggtag tgttcaata aacactgtt 300
 gacttac 307

<210> 421
 <211> 275
 <212> DNA
 <213> Homo sapiens

<400> 421
 tcctgaatt tctaggatgg aaaaagcaag aacttataat agccgctctg tcctgaacga 60
 gactggagag tgtgagaagg cagctcgggt gccagcactc caggtgccag cagacggggc 120
 tccactgaag acacgatgct gcaaactgaa aacaaaacaa caacagcagt ggtctgagaa 180
 gagcactgtc ctcatcattt gtattataag agtacagggt ttcccccat gagctttta 240
 gtgaccataa aagaccgttt aatactgcac agttt 275

<210> 422
 <211> 440
 <212> DNA
 <213> Homo sapiens

<400> 422
 gtgaaatggt tgtccataaa aaagtgggtga gttcagccga agaaattgct cgtgttttc 60
 ctcaagacag ctatgaagca aaagtgctc atgcacagct tccattttgt cacaaaaagt 120
 tgtgtatgca agagttgaga ctgaataaaa ttaattcata cagctttgtc agggacattc 180
 ttaagtgaag ctagcatctg tattttttaa agcaacaagt acatggtgac actgaagaat 240
 ccaacgatgg ccacggcagc gtgcccgcac ttcctccac cctgcccac gctccagcag 300
 gtccccctct gctgcttctg caccctcagt gcacgcacat cttangagcc naccncactt 360
 tntaagcttt ttgcnatnt aacctcatal accagcctcc acaagnggcc ttgttccat 420
 ggagacagtt gccagctga 440

<210> 423
 <211> 229
 <212> DNA
 <213> Homo sapiens

<400> 423
 cagggagata ccagggctcg tcatgggcag caatgactac gatggacaag aagatagagg 60

ccctaactct aattttctga gcaccatgga agccccctgg attctaggga gaccttgagg 120
 agaaagaaga ctctgtataa tgcctgacat tgaaattcct gcaagtctag gagcatgtga 180
 actcaaatg gaaattaatt tgatgtaata aaaataaaga agaagaatt 229

<210> 424
 <211> 100
 <212> DNA
 <213> Homo sapiens

<400> 424
 gagacaaaac cagactgaca agctgaagac tcaaacatta atcaaactgc gctccggaac 60
 aacctttccc tcgcattaat aaatacatTT gcggcccctc 100

<210> 425
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 425
 actgattcct gcatagccac tgaccacagc ttctggaaca acaaaagcat tgaatcatta 60
 atcctgaatg tggccaatga gcaagagatg aggaaatcta cccagttcat gaccacaaag 120
 caactcacca gcagctggat ggcttgggta gcttatttct ctggagagac tcttagacag 180
 tgactcctga tacagagatg ctgagactgc attttgtgcc tggaggagag aattaccacg 240
 tgtgattga gagcatcagt gttcctccag aagagacatt tctaaatgct gctagtgcga 300
 aaaatgagct tatgttcacg tagccccctgg gggaagaaaa acagtaatat ttaacagtac 360
 attttaagaa ccaataaaat tatttttaaa atc 393

<210> 426
 <211> 461
 <212> DNA
 <213> Homo sapiens

<400> 426
 ggagatgctg tcagaagccc cactacggaa acatcccaag gcctactatt acctaaggtg 60
 acaccactca gctgtgcagg ctttctccct gacacaggaa accattcgca gacattacct 120
 catcgctcta atctctatc aaacctgtga gacaggtaac agaaggtatc ctcaatttac 180
 ctgtggggaa attgctgccc aagcatcaga gtttccact ctgcaaacac tgcaagtgtc 240
 cctgacacca gcacagacta agaagtgggc atctctggct tattctggga ccaagtgcta 300
 aactgcaaat ggacctctc tctatcccaa ttcacaggg gagaaaaatc tnggttaaaa 360
 aggggngcct tnttttaagc agctgtctca ttaaggnca tccgacttgg gcagcaattt 420
 tagtacttta caagccaagt atgtttgcag aaactctagc a 461

<210> 427
 <211> 383
 <212> DNA
 <213> Homo sapiens

<400> 427

aatccatcat gatcctatgt gggttctgcc taaggaagac ttcaaggca ggaggccctt 60
gaggaagaac agaatcatca tgtcatcatc cagggtcctc tatctctggc aaagactggc 120
ctgatgaatg ggaacagagc tggaggcctg ggtatctttt gactgcaaga gtaggggtg 180
gcgggggtcga tacagtctcg cggcagccaa gacatcccca acctgtccct gaataacaga 240
caagtctaca ttctctgaaa ttctgtatca ctgtattggc aataaacacc tagagaagta 300
agaaaggagg agctcctaca aaaaaaaaaa taaaaaaagg ccagcgaggc caattcagct 360
tggacttaac caggctgaac ttg 383

<210> 428

<211> 573

<212> DNA

<213> Homo sapiens

<400> 428

ctctgctgg tctgaacac ctggcctcaa gcgacccctc cacatcggct ttccaaagt 60
ctgagattac aggttgtgaa gattacagaa atctgggatg gcttatggga cgcttctcag 120
ccctaagtac gaaaacagca gtgaaaatgg caacccaaaac atcacgcagg actgggggtt 180
ttggggaaac agctcacttt agagcagtgc agtgtagagc ttccgtctt ctaccagggt 240
ccaccttaac cactgtttat ctgaaaattt tccccctggc ttactcgtt gcagctgccc 300
actttgcaga aggatggcgc tccgatctct acgtccctg ttcttcagg gactccatag 360
tattttttt cagcgtcgt cgctactaca gcagacgctt gcgttctcat tatttgcgt 420
acagatcctc ggtgccttga ctgtaaacaa aacactttan atcattgtga ggcatgtaa 480
gcacagcctt tctgctggca gccagacttc ttaagggggg gngactgnga ctgtcttact 540
tttcgagatc acaaccacca agcgacaaaa tgg 573

<210> 429

<211> 372

<212> DNA

<213> Homo sapiens

<400> 429

tgttctagcc cagtctacag ggaatgcaca gtgagggttt ttgtgtcctc tgcttcacct 60
tttgatgtna gagggccaaa aactccaccc tcaggctgtt gtaaacacca ccatttttg 120
aacatgagtn ctgtggagat gtgnagaagc tccattgtgc ttatgcattt ttctccttc 180
ataaatatnc atgactcctc ccatacttta ttgcaatata gtatagtcca tgccaacctg 240
ctnaagcang aatatactga tcccttngct cctcccttga aatgcctagt ttgctcggct 300
tcaagantag anaangctac ngctnggcgn ngcatngtca ttaatnncn acccctgnaa 360
gggggggcaaa cc 372

<210> 430

<211> 426

<212> DNA

<213> Homo sapiens

<400> 430

atgggaaaac tggagcccaa aggatggaaa tactgaaccc atgggctctg tcactagact 60

gcatcccagg gcctcaacgt aatatattct taatcatact ggggtaacct attagaaaga 120
 accctgtcct ggaatcctgg aaaagaggcc ctgctaggag ctgaccttgg acaaatcact 180
 cccttctctg aacctcactg ttcagggggc tgagaacaga gggtccttaa ggaagagtgt 240
 tgtatgagaa cagtctccgc tcttgaccca agcaaacctg gttcaaate tcaactcctg 300
 tggttgacta gctgtatgac cttgacctt ctcagtttcc tcatctataa agcaggatta 360
 ataaaaggta cctatcta atgactgttc tgagaataaa atgaaataaa ctacataggt 420
 gatttg 426

<210> 431
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 431
 ctgcttctc tggtcattga tgtgtcagct cccgctgtgc atcancctg ctgctccccg 60
 gaagccccgc cttgcaaate acaaaatgta ccagcactc ctcacccag cctggattgg 120
 caatggcccc acaggacaca tgggaatgat gatctttaag tctcagatgc ctcatgaata 180
 aagtggatgt gatggtgcca aatctgactg aaaagtgggg aatcagctga ctttcccag 240
 ggattaaagc atcacctgct gtgcaggggt tttgtgatac atgaaggcgg tagtgcattg 300
 acggtaccag gagtaacatt atgtnattt aaataacaag ataagtgt 349

<210> 432
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 432
 atgtttcaa aaataattca tggacctat taaaattgaa aacgttgctc tttgaaaac 60
 attgtaaga aaattaagag gcaagcctca gattgagaaa aacatttgca atgcactcat 120
 ttgacaagtt aattggatac caataagcaa ggatttacta tgtgttggaaggaaaacat 180
 tctgcgcat acttctacta accaactgga aaaggcatac aattgaattg cgggagagga 240
 aatatgatga ccaaacttgg caagggaataa aagttagccc tcttggtcaa cctgggcaaa 300
 tggagaacat gcaagagact tacgaggatc aaatttcaa atctttcatt gaaataaatc 360
 aatgagaac 370

<210> 433
 <211> 138
 <212> DNA
 <213> Homo sapiens

<400> 433
 ggcagagctc ctggaacca gcatgaaata ctggagtcgt taatttctc atatgaacca 60
 gaaacaattt tactgctagg aaatatgact gtattataca caggcaatat aaaatcaca 120
 ccacaagcac atatgggc 138

<210> 434
 <211> 394

<212> DNA
<213> Homo sapiens

<400> 434

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tttgaagac tgggaagtcc aagatcaagg tgctggcaga ttcagtgtct gatttcctg   60
gtctcatctg tccttgccgc caagatggat tatctgcagg aacttggacc aacttcacgg   120
aaccttcctt atgttctgtt catactgccc agacctgccc tggttcctct gttgtcctg   180
aggcagaaga ggcctttgga ctactcggc cccacatctg tacagtccag agatgctggg   240
ggaattaaca ccacaaaagg ttgactttag atcaatgtga gacaagtatt tcaactatga   300
ttgtgtattt gtcagtgcct cttgttaatt ctgtgagttt ttctctcat ttatttgata   360
acatactgta taataatgca cattttaaat tctc                               394
```

<210> 435
<211> 463
<212> DNA
<213> Homo sapiens

<400> 435

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gaacatgtct ggcctgattt gaagctgcta catctgcttt gaaagaagcc acataacctt   60
tgctgtact tcattcaaa ttctctttg aattttctat ttctgagct gggagaaatg   120
agaggatgca cctctcctt ttctaacagg ccttctcac ttgctctgat gagtctggct   180
ctcaagttag ctgccctgat ggagaggccc gcatgtccag aatgaagcat accttctgcc   240
aacagccatc aaggaaactga atccttcta caaccacgtg ggcaacattc gaaggaaatc   300
ccccctagc caagctttga gatgactaca gccccagtgt acacctccat tgcagtttta   360
taaaagacct gagacagagg accagctaa gccatgggct agccaggatt tctgacctta   420
taataactgt gaaatagaat aataaatggt gttgttgtaa gtc                               463
```

<210> 436
<211> 450
<212> DNA
<213> Homo sapiens

<400> 436

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gcagcacata ttcccatag aaatgtggaa tgtaagaaag gcacataaag caatccaagt   60
tgctgcaga tatccacagc ctacttcagt ctacgtaatg ctcttttaac ctggctatat   120
ggagagtgta cagaaaatac aggatcatca atcaatgata cagtaaatac agaattcctc   180
acagatgatg aatgtgtgcc ttcagcttct gtggtcactt ccacctttaa ctaaagttgg   240
agttggaaga aaggcaatgt gactccaaac ttcacagtac ctccatctta gacaaacacg   300
actctctcct tcacctgcgt gccagctgag ggagttctgt tccattgctg tctccgggga   360
ctctgtcagt atatttgatg taatacttgt ttctgtccat aaaacatgtg atgatgagaa   420
gatcgcagtg cagatccaaa atcatatgct                               450
```

<210> 437
<211> 415
<212> DNA
<213> Homo sapiens

<400> 437

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aaatctatgc gaaaacaata cacagttctg gccaaaagaa gttaaacaat atgtgaaaaa 60
taagcgacat ccagaaactt cagcagctcc ctctgtcct atgcctcaag gtaccagaga 120
gggaaaaagg cccccaggag aggctgtgag gaaacctgaa ctgcaaaccc accacgatgt 180
cttctggga aaggcaagtt ggtaaagaaa gatgtgaact ctatttcagg gtagtatgtt 240
ttttcattt gcttccaaga cttgatgga atgactgag aggaaaagtt cacaattact 300
agaaagaacc taaaaggaca tgagagatga aaccgttgca gtattttga aataaatgtt 360
ttctgcaag agcagagtca aaaaaaaaaa gggccggggg ggccattca gttgg 415
```

<210> 438

<211> 471

<212> DNA

<213> Homo sapiens

<400> 438

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ggcctctgaa ttttgcattg gctcatatca tctaggga aaacaagata tttcctagct 60
tccctgatg ctggatatgt atgggcaact gactactgac caacagaatg tgaaggaaag 120
tgacaagcac gctcccagg actcatctta aaagagagag gacaaacgcc tatttctgc 180
tccctactc aatccctctg ccggaacaa gaagatactg agctttctg gaccctgtgg 240
atgagaaatg aacaaaaata cataactatg gagtttaaaa tcacaggttc catcttctaa 300
tgagcctatg tttattgccc taagtagcat aacagtaatt gttccagaat gcaaaaatgt 360
acgagatgta ctctggaaat ggaaaaatac tttcttcaa ttcaatgaac agattctgaa 420
tttaaacaa ccaatantt ttttaaaagt aacacaccta gcaagaata a 471
```

<210> 439

<211> 647

<212> DNA

<213> Homo sapiens

<400> 439

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caccagtggc tctgacagtt ctctctcaga tggcttctct gttcacctag caaacatagc 60
agatgagaat aagaagccag gctttacagt atcatgctct ccaaagagaa ccataaactc 120
cagccaagag ccagctccag gtatgaagcc aaactggcct aggagcagat atcctgccac 180
aaagagaggc tgtgtgcca tggcggcata cccatccttg cacatataca catacccgta 240
ggtgagcctg ggctgtgcca cacaagcact tcacggggg tttgagatt agacacattt 300
tataatgggg gagatgtatg actgggaact gcatttactt gtgtgtatgt gtgtgtgca 360
ctcatgact gaccttacac ttgtactta cactgtgggc atgtgncaa gatgcatacc 420
tcataaattc aactattttt tcataaaatg aaattttatt atgatgtgna aaaatgcttt 480
atcaciaact gaagtgtggt ctcatgggcc actttatggn agcacagata tacctcattt 540
taaccaatag atattctctc taaaattatg ngcaaatcaa tttttaaaa atcaaaatct 600
atgttaaaca cattttgcca ggggggctat aataaaaaaa aagtgtgt 647
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<210> 440

<211> 248

<212> DNA

<213> Homo sapiens

<400> 440

aaaatctcca tggcagcaag ctacagctgat tggatgggag aggaaattg aggctgggag 60
acctcctaga ccacagctgt aatcttccaa gaggaaaggt acttacagaa ttgccaaact 120
actgtgaaga caagactaaa cagtaacaaa catctacatt tgtattatta ctgtaatagc 180
tgagttgctt gctggttgaa aagtaaggga caacaatagt ttgtccaat aaagatgatc 240
taactgcc 248

<210> 441

<211> 192

<212> DNA

<213> Homo sapiens

<400> 441

gttgactgct catccattag cagcagatgt ctctcgagta gctgaaccac accaagctgg 60
acctgggact tgaaggagccc ccttcaacct ctgccaggac gcacgctgga ttagcatctg 120
ctagggtgctc cgtaagaaag taccaaaaaa taagtggctt aaacaataaa atattgtctc 180
acagttaaaa ac 192

<210> 442

<211> 369

<212> DNA

<213> Homo sapiens

<400> 442

tgcctaagac cagacctcga gaagcagggc taatgaatga acgggttccc caaccttggg 60
tgaagtgatc agaggagtag cagaacagag caaggaagcc agtgtgacag agaaatgaag 120
agatcaatgc cacaaaatta aagagaacac gggggctcgt cattccaaat cccccaccag 180
gaagccccta tcaggagggg aggaggagct ctaggaact gaacttgac gcaggccact 240
tcagctagag aacatttctg aggaacacca gacctctct cttccggga gcgggatcca 300
acacctggcc agacatatcg gtgctgaaca aaagtgcact gggggatgat tttaaatttc 360
ttctttatt 369

<210> 443

<211> 442

<212> DNA

<213> Homo sapiens

<400> 443

atgaggaaac tgagacttca aggggtccaaa tatcttagtg ttcttgagcc aaagtgctg 60
agtgaaggag acatgggtccc tgcccttgag gagctggcag tctttctggg gggacagatg 120
gtgagcagga gcagtgcctg ccactatgca tggttaactg agctggagga ccctgtgctt 180
cccgacctc acaggcggag cagcctctca ggaacccctt ccgaggcttc cacctgtggg 240
catgtgctt tctcatcact gctgctgctg acctttctcc ccagcaacta ccaaagccc 300
tttatccac agtctaaaca acccagaaaa ataanggacc cccccanaag gaggatgaag 360
agcagtctgt actcaatgt atgatcagta aataataaga agacaagctc ctgctgggca 420
cttagtcaa cagcagctcc tc 442

<210> 444
 <211> 658
 <212> DNA
 <213> Homo sapiens

<400> 444

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gccccgggg gggngcggna ntnntggcct taaangnggg gggngcncnc ccttnncnc 60
ttgggaaagg gggggaaaacn ccccccttt ggggggnnag aaaaaagggg ggggggggcn 120
tngggaaagg ccccttccc tttttttt ttnnttagga aanttttaa tnggggggaa 180
aanggccngg aaaaaaang nacnttccc ccaancccc aangaaaang aaaaaanttt 240
ttgggaaaaa aaatgggaaa ngccccttaa ggggaggaaa aattttaaga aaangaacca 300
accggaantt anttttgca ttggaaggga caccggggaa gaagaccaa gccntggcct 360
taaaaaaga acctggtggc ttttggcan ttgccaggc aaaaaccaag cccattggc 420
ctgatggaa attttggac ctgggccctt caagaaactt tcaagccacc gccaccaagg 480
ggaactctt tttcaccaa gtggggggcac ctttgncca aattaaaaa taagccttg 540
cttgggttat tggcattctt ctggacctt tttctttt acaccttnt tcntggggng 600
gggggaaagg gtaaatttca cccccctttt aagccaaacc ttttcccat ttcaaacc 658
  
```

<210> 445
 <211> 454
 <212> DNA
 <213> Homo sapiens

<400> 445

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gtgacgtacc cacaagaaaa gagctcttat gctctcctct ctccgggatt gctgatatgg 60
tcattgatat tgtggatttt acaaattgaa gatttggga aactctgcat tgactctagg 120
ttccacctca tcattttaca gaagagacag acatgcaatt aagatgacct gcctggagcc 180
cacaatatta gatcatttcc tcatatagta tgaattgac aaagttcaca gaaatggaa 240
catactcaca ggttgccatc aaacaaaaaa ggctggctca gaatcaggtc aggagatctc 300
cttgtgagcc catgccacca gagtcttggg tccgacacag agctgtatgg agtcttgag 360
aagtggctgc tcttggcatg cacaagagacc caagagctt gcatactctg acccggaga 420
tccccaatga atgtgtctgc actcaagcaa gaca 454
  
```

<210> 446
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 446

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aagaatctac cataaaacca acagactcct cctgatctct acctgtgctg tctgcctctc 60
tagttccgga cactgagagc tgggtgccctg tggccacctc aagctggaac cctgcaagat 120
caccaagaag actgcatgcc tcgctctagc ctctctaagg gaaagtagac tctgtttt 180
gaaagaaatt acctgatttc aagagaaaca taaaggactt ttttccctt aacattccac 240
tcgtaaaaat gaagtgttga agaactctg caaactctga gtgttttgg caattgacct 300
tttactgtac taagcaaata tgaagccaca aatacattgg ggaggaaggt atacccttca 360
caaaagatcc gtcacttagc cagatctctg ntgcattgct cttaaataa aagccatttc 420
tgggatattt tatttattta tttt 444
  
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<210> 447
 <211> 272
 <212> DNA
 <213> Homo sapiens

<400> 447
 tcaggggtgg ccatgtgacc aggtgctggc acacaggaca ggagagtata caatgtgatg 60
 accccacaag ccaccaaaca agccctgaac cagccaccag gaggactgaa aaagctgaag 120
 tctactataat ctgggatctc ctgtttcagc agcttagtct gtatcctcat caatacagtg 180
 tatctaagaa acttaaaaac ctgtgcttta ctctccatag gctaagaatc atccagatag 240
 ttgtttact tttttttt agcacattac at 272

<210> 448
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 448
 ctccacttc cagcctccct tgaccttcag ttggagccat ttgactggag tatgaccaat 60
 ggagtatata tagagggtgct gctgactgga cacatgacca gatgcacat ctctttccc 120
 ctctgtggc aaccacagag gccgcacatt acagagcata acatgaagga agcacagaag 180
 cctgagtcgc tgctgaagg agaaactccc agggggccaa ataaccagaa aattctacct 240
 tggattttgc ttaaataaga aataaatctt tattgtgtta atccactg 288

<210> 449
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 449
 gagtctctgc attangttgg acaagctctt ctggaattat ctctaagtc aactgtgggt 60
 tgggtaggng gctctgctga ttttcgctg gacttcaca ttggggacga agttggctgt 120
 catcaactct agaaagggtg nggccgnttt acattggctg gttccaca ttcaagca 180
 atagagatgc ggnttccca tgttgcccg gctggnctt gaaancctgc ctcaggngan 240
 ttcactacc tnancttcc cgacgtactg gggtttacag gcatganccc cccgtncctg 300
 cccaaggang ggctcttgag anaatttcat ttcttggcc ctgctgaang aangnctacg 360
 ntnatttaa agggcctgct tgtgggaaaa ccaccccca aaagttgctg nnaacaanaa 420
 aaaaccttt tngnangtca ncaanaaaaa cttncncct ttgnatngg gggcttttg 480
 g 481

<210> 450
 <211> 397
 <212> DNA
 <213> Homo sapiens

<400> 450
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gcttaagcac gagtgtctga aggaagtcct gttccctact gccaacccac gaggcacatg 120
 cacagtccag tcgcaggagc tgctataaca agatgacaag gaggcaagac tgattcacta 180
 ctgattaatg cctgttgatc ttcaacaatg ggccattcca acaaatgcaa gaanggaaaa 240
 atcactagcc aataacatgg ggatcctatc ctataaacag aaaggaatcc catggaaaga 300
 attctaattt tatctattta agcaactatt ggttactcat gcagggtcag aaacagaggg 360
 gactatgagt caataaatga tgtaaagggt tacc 397

<210> 451

<211> 432

<212> DNA

<213> Homo sapiens

<400> 451

gacacagtga gctcaagaaa ccaccaaaaca canagcanaa acaaggatn gaggcacagt 60
 nccacacttt ctagctatga gagcttggcc aagctactta attctccagc cttatattt 120
 ctgggctaaa aatatatggg gcaagtcttg tgaagatgca atgagataat ggatgggaaa 180
 gccctttgtg aagtgtaaag caacacacaa atgcagaaat aacaactaac agaaggctcc 240
 caactggagg atcatgtgga aaaatggaag aactgagact atcttctggc catgaacaga 300
 aggagaaaag gatgctgagg acacacttca aaatctgcat atcctctggt tctctgctt 360
 ctctaaaaat tgcaggaata ggtgaaattg agcctgtctg tttctgtaa ttagtacttc 420
 atttttgtt tg 432

<210> 452

<211> 416

<212> DNA

<213> Homo sapiens

<400> 452

agatatgaag tgaacctggc tctcactaa accacctccg ggcacatgac gcattcccagg 60
 acaccccatg aagagggggc agggcagagc tgggtggggga ctttgattt ttaattctc 120
 agcactgaca agcatcaag tgcccaggat aacagcacct aaaccaagg ccagaagatg 180
 ccatttgcct gatcaactaa aagtagatgg aaagcccaga cttagcctga ctccattcat 240
 tggctactca tggcttctc tccaagactg acaaatgag gaggttcaac ttatatgatt 300
 tcctaataca attaaaatca ctgaggggag agtcctcaaa aaaaaaagg nccnnggggc 360
 ccanttannt tgggattaan cagggngaaa ttgtnaaaa gggggggggc ccccca 416

<210> 453

<211> 148

<212> DNA

<213> Homo sapiens

<400> 453

gcacaggtgg catgctctgg cggaaggtg ctctacaagg cctggcaata aggaagggtc 60
 cagttactcg catccagtgg tctagagcat gtttgattag gcaacttta gcagtcgtcc 120
 tcagctgtgc atattaaaat ggctcctt 148

<210> 454

<211> 457
<212> DNA
<213> Homo sapiens

<400> 454

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tctagtcatt gcctcaacac cagtcattcc tactcccacc cagacaacat catctccact    60
cccaagcccg aaatgctccc tgccatgcct tcgaggctga ggtctgggaa gaagactcta    120
agaagagaga aaagggcacc agtatggaga ccctagaata taaaaagcag acttagcctg    180
tctaactgtt tccttgactt ggccatgata ccaggaatgg aggaaggata ttcctttct    240
tcctctctct ggagaggcat cagagcatgg gccctggctc tgttactccc tggctgggga    300
agttacttac ctactccgtg tctcaagttt tacttatctc taaaaggggt agagtaacag    360
cactcactgg agtggagtg gnngtatgcct cccagcctct ccttcagaac taggttactt    420
attccctcac tgcaaggagt ggtagctgcg gactgct                                457
```

<210> 455
<211> 84
<212> DNA
<213> Homo sapiens

<400> 455

```
cactttggga ggccaaagca agaggattgc ttgagcccag gagtttgaga ccagactgga    60
caacatagta aacctcatcc ctac                                84
```

<210> 456
<211> 462
<212> DNA
<213> Homo sapiens

<400> 456

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ggaataagac atggacacct ttgagaggcc attttctgc tcaccacaag gcccgaagga    60
aatggaagag gatgctaagt gagggaccca ctggcaccca ctgagttggt atgaagagta    120
tttaactctg aaacatttaa gacacagcag atacagaaag aagcctttct ggagcttccc    180
ttatttgact aaagccagag ctttcagaga gngaagctgc cataaattcc ctctgggga    240
gttcactgc cagtaaggag actttactgc caggaaggag accacttgca cctgaatgac    300
gaattgcata accgaacata atcacaatt gtcgtaccat cattgtttc cctaaaagcc    360
catttgtctt tccacaaaag gatatttgct tcccataga accctttctc tcctctccc    420
tttcccata ttattggcat ataaattct catccctaac tg                                462
```

<210> 457
<211> 439
<212> DNA
<213> Homo sapiens

<400> 457

```
aacagnatt cttcagtggt ggtctgaaga ccacgggtgt tccttgagga gccaatgagg    60
gaactgaaat ctgtgagctt taaaccgctt gcttgaagac acggctgaca ttgtggctg    120
aatcctaagt tagttaatt tccttcaat ggttcaactt gcaactgtta ggagtcttcg    180
```

aaaccttttg tgtgaatcca ggagggaaaa ttgtctggca aagtctgata agcatcgtgt 240
 caagagcaca ttgtactct ggatgggagg tgaagggaag agcagcatca tctgtgcagc 300
 ctggtgaaac ggtgtttacg acaggctaca cggggcacta ctgggggatg ctgnctcctt 360
 ggattngtc atatttttaa cccagtggga aattcatagg atcctcttga ctctgtaaaa 420
 actgtgggac aattcagtc 439

<210> 458
 <211> 660
 <212> DNA
 <213> Homo sapiens

<400> 458

agacctgggc ctgcaagagg aagagaatcg cctgaggaca caggagcggg gacgggagcc 60
 aggccttgag tcagtcctcc ctctctggg caagccatgg atcatcctgc ccagcacttc 120
 tcgtccttga cggctgagtt ctgaaggagg gaaggcaaga ccaaagaga cagatggaca 180
 ctcccgggat gacacagttc acagcaaggc caagatgcaa attaattccc taacttcat 240
 tacaacagct tctacttttg cctcttctgg gttctttcat tcaactcaaca gacatttgca 300
 gagttagctc atagtctctc ttaagtttta gatattgaa gataagcgtt aaaagtcctt 360
 atgattgggg aaccacagc ttatgggaga ggcaagtatt agaggtgatt tactacaact 420
 cgagggattt actgcaactc gagggattta ctacgcaaag tgctgggcat tccaaggagg 480
 catggaagct ctctgaacac canggcagta actgctctgc ccaagagaat ggggtccact 540
 cttgcacctt gaaggaccag ggatgaagaa agtgggtcan atgaatttct gaattagtct 600
 gactangctc tgaacctgg cgcacaataa atgnagtaaa tattgatgcc ataaataaag 660

<210> 459
 <211> 233
 <212> DNA
 <213> Homo sapiens

<400> 459

gtggaggact ttctatcatc tctaccaatt gatcaattca gaccaagtaa gcattgcttc 60
 aaaggagagt tgggttgggg gtgcatcact ccttagctgg agatacagag aaatctatac 120
 ctacaagatc ctcaaggtgt ccttgttgaa aacttcatcc aaggaaactca agtactgctg 180
 gatttngtg actcatntta cgaacnaata caaaggccta ttaactattt aaa 233

<210> 460
 <211> 628
 <212> DNA
 <213> Homo sapiens

<400> 460

ggaaaccagg aggaattcca gaatcaaaga gaaccgcatt cctctctacc acaaagtact 60
 cacacttggc aaatggcaaa gatttgggtc atcatTTTT aaacgacagc caagcattaa 120
 agagcccagg cagagagcaa gtaaaagagt ctccgtggtt cctcccagcg ctagtctgtg 180
 gcctcaaca catagcacgt tgacggaaaa attccaaatt tctgggtccc aaggggaggc 240
 attactcagc agtctcagcg gtgacggcgt cagcaggaca agagccattt gctccgggag 300
 gactttgatg ttcttttaa tggtnctgc atctagtcca atagaatga tacggaatta 360

tctttattac aaccacaagg atgtgcaaatt ttatttacag tataaatggt tctttccaca 420
 agtcctagct gtcaacaact ctttattttc ctggagtgac ttacaagcca agaattgnttt 480
 gttttctaag ctctctacct anagaggtaa aataacaatc ttggtaatga gaagacaaaag 540
 aagctaactg ttctgctttg caagcgttcc tacagaccgn accttttaac tgcctagtgc 600
 tggcaactta acatactgta atgagacc 628

<210> 461
 <211> 317
 <212> DNA
 <213> Homo sapiens

<400> 461

gactgaggct aaggaaggcc ttgtactggt ttagagccc tggacggagc tccagggtgac 60
 atgggccttc ctggttctac caccgacctg ctggggggtt cagcaagcct tcaccttcca 120
 cgttggcgtt ctacagctcta agaaaaggaa gttgatttcc atgagaggtg atcaaactgt 180
 gctgtagaag cctcagcgtt tccacagaac attagagtac ctctgccaag cagaattctc 240
 cacatggaga aacctcccct ctactgatt ttatatgcca tgcattgcaa cgctctgggg 300
 aagatttttt gcttgag 317

<210> 462
 <211> 308
 <212> DNA
 <213> Homo sapiens

<400> 462

aacatataca ttctggttcc aacatagcgg cagccagagc ggctctctta aagtgaagt 60
 gatattctgc ttctctctg cttaaaacct tcagatctcc ctatctccct aaaagcaaca 120
 accaaagtcc ttccaggggc tacatgaaca cctgcattcgt ctggagtcgt ctatgactca 180
 gccctcaatg cctacaatac tcattgcatta agaacatatt gattgggtat ggaaagtctc 240
 taaatctct ggtccacgct ttagcaaaaca cgtctcaata tattctactt ctacagatga 300
 gtaacttc 308

<210> 463
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 463

gtgagcaaac aggtttccag gcattgcatt tccacgattt gccaaaggcca acaatacact 60
 gttcaaccca acagttgttt tccactgaaa tatacaaacg attgaggaca ttgacaacat 120
 agtcctttc tagaaagatg gccatgacat cgctgtgatc actgcttaca ttccacgcta 180
 cctgatttgc atcatgtaga tgcgtctgct gtgacattga tagcctgtga ctccccagcc 240
 ttgtgaatca tgcagcgca cataatgtgc atgaatgaaa tggagtgttt ttaggatggg 300
 atgccactaa aatcatcttg ggtaatactt gtcatctggc ggnttccagt gtctggacat 360
 ntggatgaat gatctgcttg agagcccncc aaatantagt gggaggcagg ggatcagctt 420
 ttttcacac cctcttgagc tgctgtaccg ngcttattct tctc 464

<210> 464
 <211> 213
 <212> DNA
 <213> Homo sapiens

<400> 464

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ctttgaaaat ctaccattcg gcccttttag tcttccggc tgatcttcc catccacaaa    60
cagatgttgc tcactggatt cagcacttcc atcaaatcc ccaaaagcct ttatgcttag    120
aaatgaacag acatcaaaaa ggcagcaact gtctcttta ctgccatttc ctcttctagg    180
gcctgtgaca tgacaaggat aatgcaggag gtt                                213
```

<210> 465
 <211> 389
 <212> DNA
 <213> Homo sapiens

<400> 465

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aagccagagg agagggaaga ggttacctcc acatctctca agggctggga aattccagaa    60
aggtgtctca gggaaatgggc agccacagga ctacagacccc agaaagtgcc tcgaaccccc    120
ccagcaccaa gagagtgtgt gaaccagtgg ccccgctctg tccacacttg gaatgtctgc    180
ttaaggaaaag atgtttctgg ctccagtct tccacatctc gcaggtcaaa acagcttcca    240
tggggaagac atggcctggg acggtgccaa tgggagatgt atttcttgga ctgctgaga    300
aaggctccat cccactgatg gatgttggt gtgctggcag ctccgcataa tggaacactt    360
cgcttgattt ataaaggacc caactgtc                                389
```

<210> 466
 <211> 582
 <212> DNA
 <213> Homo sapiens

<400> 466

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taacctcata ggtgctgggt tgttcttatt caacttgggt aagctgagga ttgtcccaa    60
aatcccaaca ttctgtggct ctgaattaga aatggccaaa gagacatcta cctgtgtgtg    120
acctggaagg tacaggtgaa gcaggacaac tgtttctgaa gctctttaca cagtggatca    180
cagactaaca aggaggtgtc agatgggtga gcagttcagg atgagacatc ttcttctct    240
tacctacttc atcattcacg ctcatctcaa tgttggttat aaggtaaagg gaagcacgcc    300
tcaagtgatc atgcaaaca ctccagtga gacactgcgc atgctctctt ccaagtgcgg    360
gcaggcagct gtgcatgtgg gcagcccacc ccaaaggaag aagaatcagg aaaggagggg    420
cgcaagactt cggacgtatg ccaacgcata aaaccccaaa gtcaaaagct caaaccacac    480
atctgtcctt caagatgcct accttgcccc cttcaagaa gtaatttact ttcttctt    540
nctgctctaa agctttttaa taaatggtea cttcttctc tt                                582
```

<210> 467
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 467

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gtgcagccga gtctcctggc ggagtttta gagcatggat tctggcacca ggatacattg    60
gtcacatctt gactgctgct tacaagctgt gtgctgccgg acaagttcct cgacctgtct    120
gtgccttggt ttctcgtg gtgaacagg gtaggggtat atctctcac gggattgtca    180
tgagaatcaa cacattcca ggggtgactg ggaagagggt ccgagactag tgggccctgg    240
agcagggtgc acacgtcga ggagctccag ccctcaggaa tagtttgag ccacgtggtg    300
ggcaggaaat gattcgtga ataatggat taaaggggtc ac                        342
```

<210> 468

<211> 206

<212> DNA

<213> Homo sapiens

<400> 468

```
tcaacatgcc cgagtgtgt gaacgttatg agagggcctt gttgggaaca cgtgctcctg    60
ggaatcagcc ctccctctg tctgttccc actcctcccc gacgatgtc ctgctcagaa    120
cccactctc acctcagtga agcaacgcag cgggcaccct gtggacaaag ctggatattg    180
gctctgaata aaagcgaatc atggggg                        206
```

<210> 469

<211> 926

<212> DNA

<213> Homo sapiens

<400> 469

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tcaagaaact ggagnncann gccgtennac tanncnctng canngnacnt tgcenntnac    60
aggaaacgga cnggattat attanaacta ttcaatagca agacactgca cacccaatgc    120
gagaatangn cgtcaattg ggagacgaaa aagagtgtga aatangcaa tcggcgaaga    180
gtctacatca ntggacacng ctntgagag nnnnggnana aagggcctta ttccggggt    240
tattggacct ngngagcaac aaaaacaaag aacaaaattc cgggntngct ctggatgcc    300
ccccntngta tccgngcgt tgtcatcgca aagngggccg ccccggggtc tttttgtca    360
aagaccngaa cttgtcccc gtgcccttga aatgaaactg caagcggacg aagggccaaag    420
cgcnggctta tccgtggctt gggccaccga cgggggccgt tccttggcgc caacttgtgc    480
tcagacgttt ggtcactga anccggggga aagggggact tgggcttgc tattggggcc    540
gaaagngccg gggngccaag gaatctctg gtcattctc aacctttgct ccttgcccga    600
agaaaagtat tnccatcatt gggcttgatg ccaaagccg ggcgggnttg cattaccgcc    660
ttggatcccc ggcttacctt gccatttcg aaccaccca agccgaaaac antcgtcatt    720
tgaagccgaa gccacgtaac cttngattn gnaaaccggg tcnttgggc cgaatcaang    780
gaatgaatct ttggacccaa aaaaagcatt caanggggct ttgccgcca aaccggnaa    840
ccttgttcnc ccaagggctt cnaaangggc gccncattgn ccccaaacgg ggnaaaggaa    900
tntcccncc nnnggacccc attggg                        926
```

<210> 470

<211> 348

<212> DNA

<213> Homo sapiens

<400> 470

agaactgaga tcccatatga agaagccaaa ccatactgct agagacacac ggctcagcca 60
acaagtcatc agtcagtcic aaacangact tttgagtga gctgtcttaa aatatcaatc 120
cccaggacac tcaccaaca agatgcagaa tggaagcaag cgaatgaacc tagcccatat 180
tgctaacca gagaatcatg aagaagtaac atagttgttt taggtcactg atttcatag 240
tagttggtat tgcaacaatg cgtaactaat acagcatatt attactaaat gtttaaattg 300
tacttaaata taagccaaaa taaatgggtt aatccaaaaa aaaggcca 348

<210> 471

<211> 406

<212> DNA

<213> Homo sapiens

<400> 471

caactctccc atctttcatg aaaacatcaa gaggcacagg acgaagatca atggagtcgt 60
aagaagattt tggatttgg tgtgtggcct ctgacaaaac tgttccctt gtttctgata 120
ctccttgaaa cctgcgagtt caaaacctac tttttggtt taagatcaag aaacggagggc 180
aaagagagat taaagagctt gcccaattt agaaagctag tgagtgggac agctaagaat 240
tcattcaca cccgacctg gaactgatgc tcttactct tcactctct gccttccat 300
gatgaggcag gtacatccgg ggcagtattg ctgtctaggc tgttgttaca ttatggtgaa 360
agactaattc caacatgaag aataaatcaa aaatttatta attatg 406

<210> 472

<211> 459

<212> DNA

<213> Homo sapiens

<400> 472

tcaccttggg tcagaagct atttctgtaa gctgcatcag ctggacttgg accatatggc 60
ggaggcagca tctacattg atgattcaat tgaccggcg gatgactaga tcgttttaa 120
agccctttgc gttctgcag gtcgtttgic tatatcagat gcaaaaggaa gcgctgtagc 180
cacctcaaat cgccctggaa tgctcttca aatgggctgg actccgtgat ttgtcaagga 240
aaattggaca ttacctgga aagtcttcc taaacctgg gccagatgt ctgcttgaca 300
gatgtccctt atgcttgtt caatttaaag agtgtgtt aaagacttg gcatgattta 360
tttttanntt tggcgtattt ggtggaagt ggaagggaag gggccagaaa attatnngg 420
caatttaaaa accgtaacag atttgccttg gcctctggg 459

<210> 473

<211> 435

<212> DNA

<213> Homo sapiens

<400> 473

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cacacagagc cagcagaga actcaggatg gaataaactt ccaggccat gtgagcttcc 120
aggaccagc ccacatctgc caaccaccg tgcctctgc ttcatgttta cctgcatcc 180
tttactga tgccttcaa tatccgtgtg tgcacgggaa cagtgggtat gctgccaatt 240

taaagaacca aggcttcaga ggaaaggaaa ctcatgctg cccccaccac cgactccccg 300
gttcctgctg gttatttga aaagttattc acaggaggaa gagaaagagc ctctgtngn 360
gattccctgg ttacattacg ggggggggtg aaccaagggt ctctgggcag ctctctccac 420
catctgttcg cactg 435

<210> 474
<211> 238
<212> DNA
<213> Homo sapiens

<400> 474
tgccaggtgc acctgaaca atgattatga ctgtgactgg agtactcaa catccctatc 60
actgactca agaagccctg catcttcaca agatctacaa ttctatttg caaatgattc 120
ccatgtattt gtctgactg caggattttg gacaatttac ctttttctc tctgccctcc 180
attctctca cctataaaac tgtgacnata actgtattat taaaatgttt aaatcggc 238

<210> 475
<211> 447
<212> DNA
<213> Homo sapiens

<400> 475
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attccaacaa gatggcacac caccctta caccacattg gtgaagaaag ctggatgaag 120
atttcaaag aaagcggccc tgggtggagt gggcttcag gctttggcaa gaatctggaa 180
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ncagcatcac anatgncat cgagggactg acagaaatgc tgcattcatg taccacattc 300
acggaaattt tgcactattt attgtcatg agggccgaca tcaatcatgt gatagcaaga 360
aatcatttgn tcatggtaga atcccctagt tggcaaaagt tgggggttat cttatcattt 420
gacacagga agcccatat atttga 447

<210> 476
<211> 452
<212> DNA
<213> Homo sapiens

<400> 476
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cccttactg gacagaagag gaaactgagg ctccatctgc atgacgttc cagagtcacg 120
gcacaaattc atggaagaag cagcaggaaa ctcatcttc cagtctgggt ccaatgtgtg 180
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gtcccaactg tcacacctgc aggagtgang gtttgcntga aactggataa ggcctccatt 360
ttnggggagt tgaattgtct ctgtagcct aaaatctana ttttttccc tctctgctc 420
tcagngaacg gagaattcca tctcgttaca ta 452

<210> 477

<211> 190
 <212> DNA
 <213> Homo sapiens

<400> 477
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 ctgcaaaagg ttacataggg gacccgatg ctacattaac tctctgtgaa taaattacat 180
 gtaaaatttg 190

<210> 478
 <211> 54
 <212> DNA
 <213> Homo sapiens

<400> 478
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<210> 479
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 479
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 ctgagaagaa tgcagtgtct ctccctgca caggatttta acttaatatg tatgctggga 180
 ctggcaagtg cccaagggac ccattctctac ccattggctg tcagccagag aacagcctgg 240
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<210> 480
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 480
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 cattcccatt ggagagatta gaaaaccaag gaaagaaacg gaggtcttc atggtcgata 120
 agcacccegg ggccagtctc ctgacgtcca ggccctgctg aaacgagtct gttctcacgg 180
 ctgcttggtca ggggtcaaac gacagcacct tggatccgtt gtggagaaca aagagcta 240
 tgaaaacatc tgggctgagg ttccaact ggcttctcat ttggcccgg ttccaagca 300
 gtcaagctcc actgaaacat acactcccta atcgattgct gtctcaaca caaaccaatg 360
 gtggcttgg ttaagtact ancaccaggg aanaccctcc atgttctaag tggaatgttc 420
 tgtcgaaaag ctgcaaaagt gaca 444

<210> 481
 <211> 187

<212> DNA

<213> Homo sapiens

<400> 481

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cctcccaaag caagtctctt ccctctggca gcagagaagc ggattttctg ctcaacctgc    60
ttgatcacc aaatgagtca gggagaagaa catggatgga aatatcctca gtcaagaact    120
tcacaagcac cagttgcctt aaccaggggc tctagaaatt ttctagaata aatgcttctc    180
aatttgt                                         187
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<210> 482

<211> 380

<212> DNA

<213> Homo sapiens

<400> 482

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actgatactg acagaaaaat catcacatgg accctgctct catgctgtct accattcaac    60
aggaaaataa aatatgctgg actccacttg gaagaaaatg tgtttatgcc ttttaggaa    120
gtcgtgtggc agcccatag agagttggct ggggtctcagc ccagggccct gggccatttc    180
tgccaccag aactcaggga gacagtctgc caccctcatg aggggacacc caactgacag    240
ggtacctgca gttccctga gttcccagg tgctgcaag tattcccat ctctagac    300
ctagccctt tactgcaga agcctgctta catttatctg aaaattttaa aagttaata    360
ttaatctat gatgtgtgtg                                         380
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<210> 483

<211> 398

<212> DNA

<213> Homo sapiens

<400> 483

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acgtgagtc aatgaaaag tcatagttgg agattcctca tccggactgt agaaaaggtc    60
atgtccctaa ctccagaatg ccaatgataa aggacacgt acaggcatgt tagaaagatg    120
gagaagtcag aggaagatgt gcacaaagt aaatcgctct gcccttcta ctatcagatc    180
atcaccaaac actcgtggga tcactgag aaggatcatc caagtcaaga gctgcagaag    240
aaatggtgca catattcaag agtctcacct ttaccttctc ctctacagca gaactactat    300
gctacattaa ttctcttc atctgatgac ttctgagag cttttaatt tctgcatctc    360
ctatttctta cccaaggcat taaaccagct ggcagatt                                         398
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<210> 484

<211> 425

<212> DNA

<213> Homo sapiens

<400> 484

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atgatgggag gcaatgagga tcaggaagat gaagtgtaat gtccaatccc cttgaacatg    60
gcaactctgg actccctgtc cagtgtctt tccactctac catgcactag ttaactttt    120
atgactgcag tgcaaattct tatcaggaat cctccaaagg taaaattat gtccttcaat    180
ctgttctct ttgacatgcc ctctcctag tctgtgaagt ctgattggac tgggacctat    240
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ctccccactg gaggaacctg tggggccatg agaaagtat ttttctgaa aactcagttc 300
 ntntntgna aaananaaaa taangttaac ttaccaagt tgttgggagt accagncctc 360
 aaccttttg gccccaggga ccagtttgt aaaaaaaaaat tttccacgg acccagggtg 420
 gggga 425

<210> 485
 <211> 326
 <212> DNA
 <213> Homo sapiens

<400> 485
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 atgggatatg gctaacacat gcacaggctg ctgtgactct atgtgtccc tgtgtccct 120
 ctgttgctg tccaagactg gagcatctta ggaaatggct cacctggagt aactgattga 180
 ggtccagtca ggcatgtgag gacacagtgt ttgcccact ggaggacgaa ggaacaaggc 240
 accatcttg aattggagac cagagccctc acaagacact gagcctgatg ttaccttat 300
 ctggacttc acagcctcta aaattg 326

<210> 486
 <211> 226
 <212> DNA
 <213> Homo sapiens

<400> 486
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 gagacctgca agggctcttc tcacacctgg gaacatcatg gtgacattgc atctgccacc 120
 agctccagcc tcaggaaggt agcatgtgag gacaggtgtg gctagttatc atcccagcgc 180
 ctggttaagg cataataaaa atcagatgct gttggcctcc catcgg 226

<210> 487
 <211> 199
 <212> DNA
 <213> Homo sapiens

<400> 487
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 aaaaaatgct gtgtatccag cttccatcac ctggaatagg atatccgtga taagcaaatg 120
 aaacagaata aactgaata cataaagcca ttagcattt tctgatctcc ctcaaaggag 180
 tctactgaaa tactgaagc 199

<210> 488
 <211> 467
 <212> DNA
 <213> Homo sapiens

<400> 488
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aattttattc gagggtgaaa gatgtggcca ctgcctcatc tggcccacaa aagccttcca 120
cgtggccctt cctccttccc tctgcagcca cgcacacagg atccaacgca gaactgggtg 180
gcctgaggaa aggatggagc ctaagatgga aagagtctgg gtcctgaatc ccctttaga 240
agaccgctg cttaaacagg cactgaaatg cccagggagc aagaactgaa acacctactg 300
tggtcagctg ctgagattct ggagtggcct gaagtagcag tcaacttgct ttgcctattg 360
cacatataca tgctcatatt taactccaat tacttgattt aacaacactc tacaaaagat 420
gttttgaca tgctaagaaa aaaagcaatg accaaacaag tacccca 467

<210> 489

<211> 401

<212> DNA

<213> Homo sapiens

<400> 489

gttcaaggaa cacattgtt cctcaaaaaa cagaccggca gctgagagag gatggcaatc 60
ctgatggatg agaaaaagaa cagagctgtg gacacctgag agaagactat aggactcaa 120
acatcaaccc atttcagttc tgatgtcagc aaggagagaa ctggcaaaact gggccaaccg 180
tttgattgac acatagaagg ccaactgggt aaaatcatta ctcaaagact gtatttcag 240
tgcactctcc agttgtatct ggtcagggca tcatcaatg ctgtggatga agcttgctgt 300
catttagcaa aatgtcatag tgatcactga ttgttgctt gtaatagta atagcaacct 360
ttctgcaat gctataatta aaaaattgg ttttgggtt t 401

<210> 490

<211> 469

<212> DNA

<213> Homo sapiens

<400> 490

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ccaaacaagg tacctgctgg actcactgt gctgctgat ctttcagggc agctggggat 120
tgtgggcagt tgcacaacct ggaggctggc atcatggggc catttaggat tgaatctgaa 180
ggagccgctg tgggtggaat gaaatcccg caaaaagaa gctggggctg aactatcata 240
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gctcttggt gcttcttca ttgatgctt tggatgggtc tggtagaat tgttgacttc 420
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<210> 491

<211> 304

<212> DNA

<213> Homo sapiens

<400> 491

gagctaagga ctggctcaat tgactataaa gaatcgagaa tgcagctga ccaggcaacc 60
aggagacgct ttctgactt ccactatgca cgtgggctgc ataattgtgt ctgtgaagta 120
atgaagaacg tgcttgctct gtaacatcca aacgcgtggc caccattcac agatagtgtc 180
ctttgggaaa ggtgtgggta tagatgggga atggtcagtc ctatgaatat ggggtataa 240

gacagcaagg ctagaaagta tctgtgcttt cattttttaa ttttatctat tttttttt 300
 tttt 304

<210> 492
 <211> 181
 <212> DNA
 <213> Homo sapiens

<400> 492
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 gaggagaaag acagaagagg cctgggaccc aactagcatc atactactgc ttcacagcc 120
 ctatgatgact gcctacctcc ctatacttcc ttacaagaca aaataaactc cgtatttgtt 180
 t 181

<210> 493
 <211> 158
 <212> DNA
 <213> Homo sapiens

<400> 493
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 gccatgataa ggccatatct tgcaggaaga caatgaagac cagaaagtga gatcctaagc 120
 tgatgattcc atgtagtaat gagtcaaatt aatgatg 158

<210> 494
 <211> 53
 <212> DNA
 <213> Homo sapiens

<400> 494
 tcccctacca gccctcacc caacccctcc ctttccctt ttgcaggag aca 53

<210> 495
 <211> 493
 <212> DNA
 <213> Homo sapiens

<400> 495
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 cttcaccatc tctcttcctt cccatgttcc agaagattct gcataatgaa aacactgtaa 120
 tctctcaaga aatatctcat aaagagtgcg tgagaaaatc ccttctcccc agagcttatt 180
 tctctcgcat ttaattctg aatgaaggga tcataaaagc atatcaagat ccatgttgcc 240
 ccacaaagga cattctgagg caacctgaat gccccccac ccacgtgaga tagcaagtga 300
 ttttaaggg atggagtagg ctataaaagg gagtcactgg gagacaaaag gagtaaatgg 360
 aagaagggaa aggaagggag aagaaaaagg cactgaggct ggcgtcacag tctgtatgg 420
 aggcagagtg aatggtgcaa tgaaaagtc cagaagggtg aatcaganga cccatattta 480
 aatcttgaat tcc 493

<210> 496
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 496

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cttttgagc agctatggct acttagttca aaatggaaga aaagctggat tgctgctatt 60
acaatccctc tatctgtgc gaagaaagag ccttggaact tggaaaagaa atttaaagca 120
accacaagct acacaacct cactatgaaa taaacccttt ttgtgtggca tgaaatcgct 180
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ctgctaagtc taggtggtta ggcagctgtt catcanaggt agtcgcaaag caaagtttta 300
atgtgaactc tgataagctg gactaatgtt tttggggga angggtntgt ttgaaccac 360
ctggtnttaa aacagcttgt tgaaaanccc tggggtaaac atattgaaat ggctgggggg 420
aaagaaaaat gaagcaaagc aa 442
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<210> 497
 <211> 546
 <212> DNA
 <213> Homo sapiens

<400> 497

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gactctgggg agctnctgca ttaantctac cntngnncac ccatgtggaa tacctgtgca 60
tcagaatgga acagccagat ctgcacaaac aaccaaggac ttctcagggg cctctgctgt 120
aggagtctcc aagaaagaac aagctgaata ctcaactcag aatcagctga agacttgcac 180
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ggcagccaag tgaaagagtt atcgaccatg tgtgtgctga gttcagtgc gcaaaccaag 360
ctgaactgag acttgagacc tcagcatcca ccagagtct caatctagca atctgctaag 420
ggagggttga atcctgtact cacangccca aacaatctgg caggcacant ctatttcca 480
cttctacgga acatgtggga gttngttat taagcacggn gacagttcac acagaccgga 540
aaggtt 546
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<210> 498
 <211> 571
 <212> DNA
 <213> Homo sapiens

<400> 498

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ggttgggctt ccttnntttt aaaangcaag tancncctt tnggttgn ntngcnaag 60
ganggggaac cagaagccga natgggtcac tttagccag aancctccggg aaaactccgg 120
gggaatcttc cagctggctt tctttgcaa ggggaatctt ggaaccccc atttggtgc 180
cacattggag gataataaaa gtctccacaa ctttcattc aaggatgacn atgaaagcag 240
ggggcccaat tgtgaagtac tttttctgaa gtcccaagaa gtggacaact tgcacaagt 300
gaaaggnnga aacttcgtnc ggaaatcccc cttattgaaa ttttaaaaga accgngnacc 360
gtggaaaagc caacanggtc aaggggagac tggcantct tctcgatgn cnatggggg 420
gttaatcntt tganggttct tgacanccta ttcagnaaa aaaaaaatg ggaatcttt 480
genticacaa tggttttcc tnttacacc cttaaatcct tcnccttta ngttcaaaaa 540
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<210> 499

<211> 509

<212> DNA

<213> Homo sapiens

<400> 499

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ggggaaccct tgcagctgtt ccacctgaat agtggagaga ggtgtgtggc cacgctgaaa   60
cctgaaacca taacgtaaga gccaaggga gactggaaac tctacagcca tgaactaaaa   120
gcagcgtgtg tcagccgcag aatcggataa cacaacaaa ccacaaatgt gcctgccgct   180
caggctttaa agttctacag tagagcagga cccactgtga cttactttgt gtgatggagt   240
caaaccacat ttttttctt ctttttctca tcagacttca caggaaatat accgtctttg   300
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attaaggtgc tcactttcta tncatagnc atatcatcag cnccttatat ttaatangca   420
tgggggggtg gaattgtctt aatgtaaang ggggaatcaa agctttatct attaaaaaca   480
tgggttgnaa gncagactgg gaagacaat                               509

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<210> 500

<211> 475

<212> DNA

<213> Homo sapiens

<400> 500

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cagaaactga gaatgagcca agtcagaagc ccaaagaacg cccaagccnt ttnacangaa   60
agacacagag ggggtgacttc aaatgatcag tccaagagtt ttgcttgtga gaaggaacat   120
aggaaggtag ccaagtatga catggcttcc catagcccgg ctttagacac cccaacaccc   180
ctacaccac atctccacga acccacacac atcagaagag tatgcagctt cgctgggct   240
ccacccttga cagctgcctt tgtcctgggc tctggggacc tgccctcaag cctctaacac   300
agacctcang gccaggaggc ccaaaaaagc tgatgccttt gggtactgg ctggtgncct   360
aaagggcac acacacangg gtcaagtac tttgtgttna aggcccttnt ggagtaaaag   420
ccatcatctt tntgtcccc tncagtaatt tactaacaga gatggagggg accca   475

```

<210> 501

<211> 511

<212> DNA

<213> Homo sapiens

<400> 501

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gcccccttcc aatactacag gagacttagg ttctaataga acaaatgatg tataagaagc   60
agcttgaaac ctcagaatgt aaccacaaaa ccacaacagc tagaagataa tggactctgt   120
tgaaacagca gatttcctg atccacctca cctgacgtgc gacaggggtg tggcttgtct   180
cttcggtcac tgccactgct caaaccctg aggggaagggg gcgcacacag atggatgaat   240
gcaggagccc aagtggaaag tgttctccgg gtcccagga gacattccgt gtcataaaaa   300
acaggaccaa aaacagatga aattacttcg aaacaatcct tgaatgattt agtgtgtttc   360
ttgacaaagg gaaagaaaaa agtcatttgt ttccctgtc atgagcgcca gaaaggatta   420
acgtcatttt tgggcaatgg gagaaaaaaa tgccaacat ttgnttacag tcacgtcaa   480

```

aacccttggt tgccaanttc attttctaaa a

511

<210> 502

<211> 506

<212> DNA

<213> Homo sapiens

<400> 502

gagaagacac aagaatttgg agacagcaga ggatacagag agtcagccaa ataaactggt 60
tggatcacct gttccagtgc tcccaccac catacagaac cttcataaat accactcaaa 120
gaaggctcac tatcaatact gttggtccgt ttctctgga ggagaatgtg tctctgctgg 180
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ctcagccaag aagaatcagg gagcacaggc acacactcac catgctgaac agacagcgag 360
gaccacattt ttattatctg attcctattt gaccatctga tgtgcaaatt ttacctatca 420
tggtgctttt gctccagatc taagtgaat catagtggaat ggaggcttca tctggtcntt 480
aaggaatctc aagttttact gatcta 506

<210> 503

<211> 499

<212> DNA

<213> Homo sapiens

<400> 503

ataagaaaat ggaggtcaca agctggagaa ctcttgctc aagttgcata gctaataagg 60
gacttagctg ggattcctgg ccagcagtgt ggtccaggc ctggtttcta acttcccctt 120
cttggcaacc accttcacag aggaatgcaa gagaagcccc ccaacctgcc ccattccag 180
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cactgttcac caacaaaaag tgaatctatt acaacgcaca tccctgcttt gctgttttta 360
tggttgctt gtggaaagca gggctctgtag aagcgcacta agaaaaagcc tgacagagat 420
cccagcgacg nticanatca gaggagaaaa atctgtccca acctatccg ttggangca 480
ggggggaagg ggtcttttg 499

<210> 504

<211> 471

<212> DNA

<213> Homo sapiens

<400> 504

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tggatacagg ccgggatgct acaacttgc ggttgcctaa ctctagatgg tcaactgtcc 120
gttcccagag ctttggttgc ctcatgctgg cagatcatca ctgatgtcca ttcttcag 180
gtgtttagtt cgtaggccag tcttgagttg ttgagtgaag aagtaggaag agtacgcagt 240
gataacatga ggagcagaac agaagactct ttgtgtgac ctggaaccaa aggtcatcat 300
gctggggcag agtgtggata ggaggcagaa gggactacat tcatgagca cttattatat 360
ataagaaagt gttattggct gggcaccgtg gctcacgcct ataattccac acttttgaa 420

ggccgaaggc atgaaggatc acctgaggtc gagagttcga gacctcgaaa a 471

<210> 505

<211> 499

<212> DNA

<213> Homo sapiens

<400> 505

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gtgcacagtt ttaacagac tgctgaatga gaggataaag gcattaagga ggaacagccg 120
agcttttatt gagcaggact gaaaggggtga attggagaga ggtgaagctc aagagcagga 180
ggtggaatga agttacagac actgagaaga aacctgtgaa ctctagtgt gaaagaccaa 240
aaggaaactc ttgataatgg aagacaagat gcagcctgtg tgtaagggga aggccagtag 300
gaagcagggga gaatgtaatt gttgggaaat cagtggagat ataccatagc attctctctc 360
cccacggcct gccagtgca ccaggcacac taatcagcaa tgttctcatt ctcgagggca 420
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tcccaaagc ctgcttgt 499
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<210> 506

<211> 335

<212> DNA

<213> Homo sapiens

<400> 506

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gattctctc acaactaata ttgatcttcc gaaggacaaa tgaatgagaa gcctcaatga 60
cagcaagaga aatacacaaa tgtctgcgac acaaaaacac agcaggcaat gcgtgcctct 120
tccagacatc tctaaaagt cccaagttt aaactgaaga agggctgcta gaaccaacgc 180
tcttaccacaa tctatttcta gttcactggc taaaaagtgg ctggagatac agtgaaggat 240
tttgacttaa caaaaatttg actcaggaaa ggaaatgtct ttttggtgta aacaggtaga 300
ctacaaaagg tattaaaaac actgttgcta cacag 335
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<210> 507

<211> 375

<212> DNA

<213> Homo sapiens

<400> 507

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cacggacaca cctactcctt tctatctct cactcaagtt cacacctgtc acaggggagc 180
agcccattct tctgatggac cacagatgct ccagtgccag aagatctgca gtcccagatg 240
agcagcagca gtacaagata catttccac tatgtaatcc ctccccttg ctaacagttg 300
attcactctg gggtagacac tggacctaag gtgtgcatcc atagcttng aataaattaa 360
aaagctttaa tgtct 375
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<210> 508

<211> 508

<212> DNA

<213> Homo sapiens

<400> 508

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ggtagtaggg caactccctt acccttgctt ggactcttac tatcaaagcc ctccattgat  120
aaggtctagg ccgaccacac cctaaagcat ttctgtatg tatggatttg ttcttacct   180
atactgaag aatggcgctg gtgaggtacc accttggga gaattgagaa catcatccct   240
taggtgtgtg aagtgcaca gtaggaagac gggcagagaa agagcccctg ttccaagctg   300
gccgtcattc agctgagaag acggcttcc tggaggctcc acgcacacca tgccgncgca   360
ccctctcag ctgatctgtg gccagctgc ctcacggcaa taccgagca tgtttatat   420
aangcttca aagctgctgc tgctgctgt gccactctg cagtggctat acctggnctt   480
taatgnctct gctanacaga agcatcat                                     508
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<210> 509

<211> 491

<212> DNA

<213> Homo sapiens

<400> 509

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tggctcctga tcaggctgaa ggtgaacatc aacaacagca gagacaatct agaaaaactg   120
ccaggatgat cagaaggaga ggtggcaggg ctctcagga gtaagcttg ggaacactga   180
ctgcaagctt ttaggggaaa gcctggcagt acagaaagga ggatgaaaaa tagaaaaaat   240
ggatttgaga ttagctctca cctctgggga cagatccac aactcctcac ataaaagaga   300
tgccagaagg agatatcaag gtaagggtat tatcacgaga gactcaagac agtcaattt   360
gatacctcta aaaaatctgt taaagtcaca cagtaatgg cttaaaaaat gatggcccct   420
ccccccactc tagatttaga tgaaattgng gtgaaatcct gagctatctt caatgaaaca   480
tgtcttcaaa a                                     491
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<210> 510

<211> 507

<212> DNA

<213> Homo sapiens

<400> 510

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ctgctggtgg atatgtgcat caatggggta gctggccaag actactgggc cgtgctttct   180
ggaaaaggca ttcagccac gctgatgac ttccctct tggagttctt cgtagcttgt   240
gccacagccc atttgcgcaa ccaagcaaac accacaacca atatgtctgt cctggttatt   300
ccaaatatgt atgaaagcaa ccctgtgaca ccagcgtctt cttcagctcc tccagatgc   360
aacaactact cagctaagc ccctaaatag taaaagaaaa angggnatca agtctaactt   420
catggagaaa aaccacttgc aaaaacttct taagaaaang gcttttattg ctacaatgat   480
ttctaagctt taaaactggg gttgagt                                     507
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<210> 511

<211> 449
<212> DNA
<213> Homo sapiens

<400> 511

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gaaacaaact gagaaaacac cagacgtggc gacatctata actttctact tatatgctca   60
tcattatgtt agtgtcatgg accttaacag ttctgtctgc ccagaccact ctccttcctc  120
tgaaaacgga actcctagtt ttctgttaa taccgccgcc ctctggaccc tgtggttcct   180
atggcagccc ggtttccaga tgaaccaatc ccgtagtcca ggagcagtc cctgacccaa   240
gctgagccaa tgagaggtct accttgtgca agttgatgcc cgcctttct gccagaagaa   300
tatcccgac ccatcccttg gttccagacc attcctgaag gccccagcag caagngtcat   360
gcctctcttg gcttggtaa gttggccct ccttgatttg ggggaagcca atggatcatc   420
atcttgatt tcagtcactt gccatcact                                     449
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<210> 512
<211> 451
<212> DNA
<213> Homo sapiens

<400> 512

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tgtgaattct tcctggagt gaacctcttg gatgtggaac acgacagaac caatactggt   60
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ggttaagcaa aagcaatgtt tgttgagcaa actcagcctc ctcatctgtc tatgggtcta   180
agtcattatt tctttctg gactacacta ttctgactcc tcaaaaaga cctttggtca   240
ctttgatggt taagctgtt gaatgctgca gaacctgac tcaccacgtt tactggagga   300
gccacaaatc catgatgagg aaggcaagnt tgcctttact ttacacagnc anactccctg   360
gaaagcgggt ctgagacaga gattggcatt caaggagtga atgggggagt ggcagagggc   420
tccttggtgc aaccactgaa gggaaaaact g                                     451
```

<210> 513
<211> 198
<212> DNA
<213> Homo sapiens

<400> 513

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gttgaaatta aggagccag caaacaagga cggtgcaatg gcagttagaa acaacagtt   60
tgaaagggca gatgaaacag actcgctaca agacaagggg attgttgaaa agccctccac  120
aacaaggaa atgaactcaa atccctaacc tgcggggcgt tccagcaacc ctgaggccaa   180
aaataaagct ctctgatg                                     198
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<210> 514
<211> 461
<212> DNA
<213> Homo sapiens

<400> 514

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gaccactagc tctgggggaa gccagctgct atgctgcaaa cagtcctagg ggagaggaca   60
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atgtgggcag gaaataggcc acctgccaac agccacctga atgagctcag aagcagatct 120
 tctggcctgc tcagcttcag atgaatgcag cctcatgaaa gaccctgaga caaaaccacc 180
 cagtaagggtg gccagaagga tcacctctcc ttatttatgt atatggagac ccatgagaaa 240
 aatagggaaa gagcaattac aatggcaaca gccaaactgaa tccttcacc cactggattc 300
 ttgatgaac tgctgcagaa gctcattcat gccttgngat aatcnccana caaganatcc 360
 ctgcctctt ccttacgtaa gatgttctgt tgggtatgaa gcaagaggtc atactcgcaa 420
 ttgacaagcc catgccatac caaagagtat gtgtactgca a 461

<210> 515

<211> 658

<212> DNA

<213> Homo sapiens

<400> 515

gncngaaact ggancntttt tccgaggggc cttttingan gtgncttgga nttccttggt 60
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 caaaaaacct ggaaaaattt tggtaaaagg aaaaataact ctttcaaagg aaaccgccaa 180
 gccggatttc ttggaaatgg ctggattta ttattcaagc cggatttctt gaatggcccg 240
 gattattatt caagccgatt ctgaaatgg ctggatttg gtgtcaagc cggatccttg 300
 aagatcaaga aagggccagg tactcttggg ctacaagct tgcctcctt acaaaccctt 360
 gcaaaccctt atttgcccc aaggtaaaaa aacaagccgg ggggaggaaa aagaaaagcc 420
 cccaaatctt aagccccggt cccaaaatca ccaccacna aaggggcatt tttaaattt 480
 cancaaagaa gnccttaaatt ttccaccctt ggtangggaa ccacttagcc tggtaggtcc 540
 caanaaaacc gtaccggta agaaaagaaa atatttgggg aaaaatanta ntgcttgagg 600
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<210> 516

<211> 260

<212> DNA

<213> Homo sapiens

<400> 516

atcttctggc aactggctga tctgccccca accagtgact catgcctcaa ccagtctgt 60
 ggccccatct ggaggccgac tctgtgcagg aggaccattt tccacacctc tatgatacca 120
 tetccaacctt attcctgcc cctgccccac caactgttc ataaaaagcc tagcctcgga 180
 cttctcagag aactgtgatt gagtaataac tccaactact gcatggccag cttgagtta 240
 ataaaactct ctcctgcaat 260

<210> 517

<211> 436

<212> DNA

<213> Homo sapiens

<400> 517

gtttgtgaac atccacgtgc agagattgga tctgtggaaa cggcactgct ccagagactg 60
 cgctgaacca gcaaagaatg aactgtgata acaagcaggg agctctgtcc ctgagaacgc 120
 ctcacagaaa gactgaaacc acagttgctg acctgagagg ggagcaggag gtggaaactg 180

gaaggcagta gtctaactg agagctgaag aggctacaca gagatgggaa gatctcctaa 240
 tgcactgac attgtgtgc tcacatgggt aggttagatta tcataccacc tgcaaataat 300
 tacagnnttg tcttttctt cccatactta ttnctctca ntttaaaaa tttatttgn 360
 atcattttgg ctaagggacc tcagtacaat tntaaataat catgggttaca ataaccaa 420
 gtatccagct tagatg 436

<210> 518
 <211> 452
 <212> DNA
 <213> Homo sapiens

<400> 518

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 gaagaacaga agagtctaac attgaaggg aatgagaatg aagataccca cgcaaaccct 120
 tccaaagctt tcattgtgtt caagttaaaa aacaggattt tgtgtgtgca aagggtgctgc 180
 aagcggaggg tgctaattggc tcataactgc cccctctcc agagatttcc tcttgacat 240
 ttgcctggga gggtacctcg ccacccccag cccaggggca gccacactgc aagggttaat 300
 ggacatgaag aatacaaaa accngcccac cccntcaag gnggaaaaa ggatgcaatt 360
 tctgatggg caaaggcagg caaatgggtc ttactccac attgtctcag gaaacacaat 420
 aatagtcact tggtctcac catatccct ta 452

<210> 519
 <211> 290
 <212> DNA
 <213> Homo sapiens

<400> 519

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 catttaagcc gaaaactcat tacagaagaa aattagaagc gatgagaact gcaaatcctt 120
 ctttattgct tctctaattt ttcaaaaaca aaacttaact actgtaacga aactattcag 180
 ggaatagttt tatgattaaa gaaaaaaaag tgttgcgcaa aaaaaaaaag gnnngcgggg 240
 ncnnntnanc tnggncttan cnaggngaa ctgttcaaa agggggggggg 290

<210> 520
 <211> 577
 <212> DNA
 <213> Homo sapiens

<400> 520

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 ccaatcttg cttgggctgg ccttaacaa cctntactt tnaatctgg ggcaagctn 120
 caanggaang gaacattctt actggccacc aaagttinaa tccaagcaa ggttaacct 180
 tgggccacct tenttcttg gntgggccc attggangct tctaaccaat ggtacaaatc 240
 ccaatcaatc taactgggtt gggcttcaac caccaagggt ttctgcttct gggaatttcc 300
 gggctttggc cctttccgc ttggctgggc ccattggggg tcacaacccc acccaangga 360
 aagaataaaa gcttngaag ccttgacttc ccaacnaaac ttccctttt tcacggaaga 420
 agtnaaaca agcaagnctt ggaangggcc cttttaacc aaaaanggc aanggttggg 480

ccccaanttt ttggggaat anttttccaa gcccncccca gaaaaatcan ttgangcccc 540
 aaaatnaaaa cccctctttt tntttttat taaaatt 577

<210> 521
 <211> 664
 <212> DNA
 <213> Homo sapiens

<400> 521
 cagaaactgg aggggtattac acaatgggcc ctcggtttat tgggagaatg ggagccattc 60
 ccaactgggtg ggggggaaag aattttccgg tccccaggcc ccagctgtg gaagaatacc 120
 aagtaaaggt ttcaagaat ggtcaaggaa gggccaaggc cccggccccc ccttggtt 180
 cggggccaag caacaacaaa cgccacaatc cttggaaag ggaagggtcc ctggaagaa 240
 taccgaatgg aacaaggggc ccattcgggg ggggaaagct tgcttcaagc cgctgggaa 300
 gtgggtggga ccaaacaat tgaaaactc acttgacaaa aggggaaaaa ggggtcttt 360
 cctcaataaa ccttcgat cccgaaatac cactgggca aaaaggggca acaactttt 420
 tggcttggg accctcttc cccaagnitc tgaataccc ctttaagaa aagaaagaan 480
 ttttaggagg taacctncc aagaatttt cntttacaa ttgggcaatc ttnccaagaa 540
 aatggggent ctngggtaa tttaattggg aaatcctaaa ggnggccctt ttttaaat 600
 ggtattcccc accgttttg gtnccctt aancattct tttttttt tcaagaatga 660
 atgg 664

<210> 522
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 522
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 tatctgttcc ttaggtecaa tttcaagtt ccaagcattg gcagtgtgac cacaaatata 120
 tatgatctga tgctttattt gatttttgtg tgtttttt aatggaagt tagaaaggga 180
 ggggaagaagg gaggggaata ttgatttgc tgtctagcca acacaattct aaaaagcatt 240
 aagtggaaac tgctacaagt gttatttct taactcttc tggataatg ggaacagtca 300
 agatctgaac aagaagtcga tataanggtt tgcgggttat gataagcata tcagccagng 360
 gatagactaa accccagtga cagctgggat ggttcttga atcagacatn cttcaataac 420
 atgtttcccc aaagcttata aacattggtg g 451

<210> 523
 <211> 666
 <212> DNA
 <213> Homo sapiens

<400> 523
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 caattaaata aaccctaca aatgggtctg gtaaatggg gccaaagggtg gaaagaaaag 120
 gaaatccggt ggtggccttc ttccgctttt aaaaatcaaa aaggcttagg aaaaatggaa 180
 ttaagcctt ggacttgag gggaaagggg cattggtttt gaaagcttga aaacaggact 240

tggaaaggcc aaggttcctt cttgcacca aaaagggcc aaagttgtt taaaagcaaa 300
 aggggaaaaa attatttgg aaagtaaat taaaggtgct acttcttaag taaaccacaa 360
 ttttgataa agaaaaaggc caaaaacaag cctttattg ctgggtacc aagaagaaaa 420
 gtttggagg tccggttgg gggtaggaaa anaatcnaaa ancccaggcc ccccaaacca 480
 nttccntt ttaaagccaa aaaagcccct taattccca gggaangggg ccccttaaa 540
 cctctntt tcaaattct tnttgaaaa gaaccttaaa gaaagaagcc ttggactta 600
 agaaaccccc aagacanggg gacntctga ctcaagcct tncacgcca ggaacaacca 660
 agccaa 666

<210> 524

<211> 580

<212> DNA

<213> Homo sapiens

<400> 524

cataactga nagtcanagc tcttctgt gtcacccag gcttggagt gtagtgggca 60
 ntggatcatt aagcttttt caaangctt cttccaact tctgggctt caaagccaat 120
 cttcccat tctcaagcc ctcccaag gtagccagg gactaccagg gtggaacaa 180
 ggaaaaggaa agtggctgg ggtaccact tccaaagaa tcaaccctc aanggtanca 240
 ggctggtt tttggctc ctcccttg gtcttttc cttccac ttcgtggga 300
 tgaaagaaa aatggacaaa agcaaaagcc acacatggga aagaaagtct tgggacctt 360
 ggctgactac cgaaagagg acaacaacg gntcaactt gggacactga ancctggact 420
 gnttagatga tcagacttag gancangga agatttaaac cncctgggata tgaattcaag 480
 ggcattatgc ttttatacc tacaagggtga agccaggctg agactcaana gaaggtaaa 540
 taaacttnt tccaaggacn aactgnttag aaactggaaa 580

<210> 525

<211> 519

<212> DNA

<213> Homo sapiens

<400> 525

gagctggagc gacaacaacg acgncgttc cgttcaacc acctttctt gttcccgtec 60
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 aacagaaagt cattggcggt atggttga gcaagaatna agaagccaa cgtggggcaa 180
 agtttcttc aagggtacc cgacagggt ccaatccctt gagaaacctt gggccaccc 240
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 caacctggct gtctgaagc ttgtaccaag ttcgaccaa cttctttc agaccacggn 360
 caccggcca aatncttg tgaaaggccc ttaaccaact tggncggaca caaaacttta 420
 cccttgta agtgactga tcgaccagg cacattcaaa gaaagaacgg ncaattccga 480
 cagaatttt gtacctggg ggacctggtt gggaacgt 519

<210> 526

<211> 364

<212> DNA

<213> Homo sapiens

<400> 526

gaaacctttt cctcggagac gatttagaag atagaaggta atgatggcca atacagaaa 60
tgcatttta atntcaaaga tgaacaac caaatggaag aggatgagag aggggcaggg 120
gcgccaagtc accaggcaag gtttctaagt gtaaaatagg aagcacacag acctgataa 180
gtanttgatc caaagtgaa catcaacgta aacagctgac tgaattgaa gccagactg 240
tctgatacta ctgttcagc ttgaaactg catcattcca gctgataca ttaatatagc 300
aatctgtata aaaagtictt aactgtgaga cagaatccag gaactactaa cattcttaa 360
agac 364

<210> 527

<211> 304

<212> DNA

<213> Homo sapiens

<400> 527

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attatgaagt ttggaaccag atgccaggag acacaggagaa ggctgtagat gctttgaact 180
tgttactgg aggaatatgc tatgttgtgt acttcatctc tatgaatatt tagcaaggat 240
ttctactgaa cgtttgcat aataaaaagt atgccatcag tttaataaa gagacaccca 300
ctcc 304

<210> 528

<211> 447

<212> DNA

<213> Homo sapiens

<400> 528

gtccccaggc actgghanana ancagagcta aggaggggaa gtgtctgtct gtcttctga 60
aagcagctgg gagggggaaa aaatagtctt gtccactttt ggctatctca agatgaacat 120
ggagctctcc agcagaggaa atgtctagga ggataaggta acatctatca agtgaaccta 180
ctatgcgaac acatctgctg ataggcctga cccatttcta tcacttgaga atctcaagta 240
gcttgtccac cagccacaga gagatgagga aactctggaa aaagcagctt gcccttagta 300
tgtcaggctc acaagaaaag ggagacantt ggtnggggng tttttgggg cagggaacc 360
tncctcacag gacacgacct gggaagatca naaaacccat tggnttaagc tncaaataga 420
gaagatgttt gaaacacaga gaaggcg 447

<210> 529

<211> 450

<212> DNA

<213> Homo sapiens

<400> 529

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aagcaactaa aatctgattt gatgggtaaa agctggaaaa atccaagaat gaatgaaaga 120
gcttgtggat aggcccagac agtgggcagc atggctcttc tccagcctgg gacacagctc 180
atactcagg gtggatcctg gagagaagct gcctgagttc agccttggcc tatccagta 240

ctcactgtgt gcaccagag gagcttctgt gtatctgtga gacctgttt cctcatctgc 300
aataccagga ctcatttct aacngggctt ttgaaacctn aataanntaa tgtaaggctt 360
gggccatgta ttttttcaa naatcgttgc tgtgaaagag ccagtgaagt cacagagggt 420
aaagtcaatg gtcaaccttc ctgattaatg 450

<210> 530
<211> 248
<212> DNA
<213> Homo sapiens

<400> 530
ctnagnaana aaaaantntn aaggggcana catnaaaatc ctgaacaaca gctttaataa 60
tgctagagag gcaaacctca gaaaaataact aaaacagcat caaaaaggaa tcaaaatacc 120
agccacaatt ctatttcacc cccccaacaa ttatcaaaat aactcaactc tcacccaaaa 180
aaaaaaggcc ngcgaggcca attcagctng gacttaacca ggctgaactt gntcaaaagg 240
ggggggggg 248

<210> 531
<211> 356
<212> DNA
<213> Homo sapiens

<400> 531
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actgcaggct gtgtcccacc atggatcaca ttcagcccag actcagctcc ttctgcaacc 120
ctgccaaaga gcctacgaat gacggcccca tagcccaggc cactctatta atgaagaaga 180
gtgactggg acacttgagg agaacctgtt ttgtctcatg ttttgaagc aagagtaaaa 240
aatggaatgc ctcaaatgc tacaatccct ctatattcag gtgagggaga ttcttgtaat 300
tctgtgggtt atgacatgat attcntttaa atatttaana acctttggtt aaaatt 356

<210> 532
<211> 455
<212> DNA
<213> Homo sapiens

<400> 532
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tgacctggag ggatgaggcc tggaggccga cagcaggact ccgtcagtga ttcttcagc 120
tcttgaaaat gatccctgaa tccaacggag ctgcatctac agaataaaa aggtagaaat 180
tcttatggac tggaattctc ctcaaggctt actttgttcc tgggatgcag tggatcatag 240
aagatagggc attgactcac tcagacctgg cttgccagc atgcattgca acaatgatgt 300
gcaagttatt aaagacatga gtgaattcnt gccaaattgg canaaaaaaaa accaagagtt 360
ttntacaaca aaaaactgct tatggaacat atacttctgc ttgagtgaa tgtgttgggc 420
ttgagtgtaa gaaaatgcaa gctgcaaadc taaaa 455

<210> 533
<211> 456

<212> DNA
<213> Homo sapiens

<400> 533

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tctagcactt tgacatgaga actgaagaag aaggttttag gtctctgacc ttgccctgct   120
cctctgtct atcaatcctt tgcatttcc aaagcacaga atataagttg ttctctgaag   180
tttctcatc tgcccaaatt tcagacatgc caaagaagaa aacagttacc ttgggtcct   240
tttctaagct ttattaact gaactcatct tgcagaaaga aagactgaaa tctgtcaaca   300
cacttggaca gactttgtc aaaaataact nggntnggtn ttaaagggcc ccaaacanac   360
cttgntccca gggccattgg ntgttattg gaagcccatt ggaattcttc cttaaagataa   420
tttattatgc tccgtcaaat catccatact tgaaaa                               456
```

<210> 534
<211> 444
<212> DNA
<213> Homo sapiens

<400> 534

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tgaaggttg cagctccagc ggcctaaag gaggagccag gcacagcgga tgaggaaatc   60
tctgcccaa gaagtggcag gaagactcct ctccctgctc acacaggctc ccaacatcac   120
tcccaggaaa acaagtgcc a tccccaca agactgtgag ctctgagcac agcagagact   180
ttgtcagttc tgttctgga tgttcaccag cacatggcag caaatcctga gagctggctg   240
cagtcagact cttctacctg acccaggagt gaccggggca cagagctgat tccagagaag   300
tctctctaa aacaaggnat gggaaccact ttttaaccg gcnttgttg cctttacag   360
ttgaggcact aaattcatgc atgagcggcc tgggttcaaa ccctactct tgccacttct   420
tggctgagtg acctagaacc aagc                               444
```

<210> 535
<211> 502
<212> DNA
<213> Homo sapiens

<400> 535

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cagaaactga agaaccnna tggaaatcg nnggaaatcc ggnnttttaa nttaacnngg   60
nancnntcc naaagtcctn ggaattttgg ccanggttt ttgatggac tccttcccaa   120
atttttaag ttaccggct ggaaaactgg atggctggcc cgatcggcct tcgggaaagc   180
cccggtaaga accatcacgg gatgccgaag ctttaaggt aactcttcac agtgggangg   240
acanggaatg ccaggccntn tgaagcccaa agcttaaagc catcatattc ccggggacct   300
gcacacattc aagatgggcc ggnctctggc cttaactgat gacatttcca nccccaaaa   360
gaaatggaaa atgggcctgg ttctggcct taactggagg acattattt ggngaaaatt   420
nnttttctt gggctatcct gggcccaaaa gttcccta attgagcacc cttgggaacc   480
ccaattctt ggttgccaa aa                               502
```

<210> 536
<211> 448
<212> DNA

<213> Homo sapiens

<400> 536

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cagggaactg aaccagtggg aggaagatgg ggcctctgat gcctggatgt gaagaattca    60
gctaaaattt tcaatagatt gctgaagggc caactatgta ctagcatgag aaaatagaat   120
ccctggaact gcagacacag aggggttcac agccactctt ttccaagaac ctctctatgt   180
gctcacagag aaagagtggg ggcaggacta ggggtacagg aaagctaccc tcaattctac   240
aggaggggagc agatgctact aatggaaagg cagagagctc ttcaaaatta ctgtccctt   300
aaaagaacaa aagctttaaa ttgctgggga aagaagnacc atacactgtc atgctggggg   360
gcatctgtat ctgaggaaa atgttaaaga atgaaagact tcaccctgc agaagaacag   420
taagtgatcc tagacctgga ctatcaga                                     448
```

<210> 537

<211> 489

<212> DNA

<213> Homo sapiens

<400> 537

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gnanaactga tgacacagng gngntccaaa aatnaccncc cgcncagggg cttttgntt    60
ggattccgg aagaatcaan gggcagctgc aatgactctc ccgcccgga ttattggcat   120
tggcagcact tattggcagc tggcagaacc cagaatgaat ccacagggaa tgctgtagt   180
tanccaaatc aagtaccaa caaaatcccc gaaatgggtc aaaccagaca gttcgaactt   240
ttgggcacat gtgtatgctg ggagcaccca gttctagtc ccagaatacn ccaaaaaaat   300
aggaaaacct atgtgctatg ggcttgata gggaatgcca gtaattagt gncctggtct   360
tcaaaatcat tggggatgta aaanactgca accanaattg cttntgagt aacctgaggc   420
ataaaanagc tgctgatata agtcaaagct tgcctcttti tggngggccn ccaacatctg   480
gtattttta                                     489
```

<210> 538

<211> 315

<212> DNA

<213> Homo sapiens

<400> 538

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gcagggagaa aggaaatgag aagcgtacgg aggtcgagag gattcagagc tgtctactct    60
ttaatcagaa ggaattactg aggagagtta gaaaggcgat gtgctcaata caaaaccggg   120
actgggatga gtatcaagtt actgcaactc gcttccgcc agaacaacaa acgaagggtg   180
gtagtggga atgagactct caccagtgtc ctctgctgaa gttccgggtg catacctccc   240
acggctactt tatttactgc agctggccaa agttttatag cctgtttcat gtattaaaat   300
tcaaattgtg aaac                                     315
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<210> 539

<211> 307

<212> DNA

<213> Homo sapiens

<400> 539

gctgttgcta cccatgtgag agtaaagaag ggaagttaaa tcagtgtgc ttccttgat 60
 ggttccattg atccaaaagc ccattgaagt caataggatt tcgtctttag cagaaatgct 120
 gcacttagat tatctccata ggaaagtaca gaaaaaaaaa actgatcgaa atagctgagt 180
 tactttcaaa ccaccagcct gctttatttt taaacatatt agaagtttca ctaatcttta 240
 aagnggattt tgtncactga gagtaatact tataataata atataatgca ttaaagaaga 300
 gaaaact 307

<210> 540
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 540

agagaagaga aagaaagaga actccttgaa cttgaaaaca gaccatcaat gagacagggt 60
 ctactgtgt tgcctaggct ggtcttgaac tctgcattc aagcgatctt cctgtcttgg 120
 ccttccaaag cactaggatt acagatgata caggttaaga ttaagctgtt tcttcatgt 180
 gagtctcatt actgagatct gattccacct acaaagggtg cctctagggc ttagattga 240
 gatgttaaca tggactgaac tgtgtccctg caaaattcat accgttgaag cccagctcc 300
 cagtgtggct gtagttggag ataaaacttt ttaanggan ggtaatcaag cttaaatgaa 360
 gtcataaagg nggagctcta atccaacagg gtcgatgcc tcataagaag aggaagagac 420
 atcaagagtg cacatgcaca at 442

<210> 541
 <211> 469
 <212> DNA
 <213> Homo sapiens

<400> 541

aatccctgc tatgtgcttg tcacaggaga ggcgctcaac aaatgtcagc tgaatgtatc 60
 aatagaaccc acacaagtc aaacgtcaca tcaagtaac aagatgttta gctgggcaca 120
 tggccactca aaatgaagac ttattcttg gctgccttg caggaagata tggccacgtg 180
 actgagatct ggcctatgga atgtgaatag aaatatattg cacctcccc ttctcttc 240
 ttctgatcat ttatccagt ttcttgaac ttggatcggc tgetgaaact ccatctegta 300
 ttatgagggg aaaggccata gtccactaga gttactgga taggaagctg gaaaaagcct 360
 gtgtcccaa ggaattttt gagcaacgt atcatgtcac tcttgattg actgcctaca 420
 agacattttt aaatgtgaga taaataaacc tcatatttt taatcaaaa 469

<210> 542
 <211> 470
 <212> DNA
 <213> Homo sapiens

<400> 542

ctacttecta cagggtgagc ccaggacacc aggacagagc tgctgccacc tgcccatgtc 60
 ttccaaaagc gacattttga gctcattact actagatgtc acaatacaga atagggtata 120
 cgtcgtagcc ggctctcagt cccaaaagca gggtatggcc atgcaggaaa taaaggttac 180
 agagtgtga cattatgtg atgacatgtc gtcttcccc aaaaaagatg cagcaaagtc 240

taaaactgga aagagctttg gagatcacca acttaacatc ttggtattt taaagacgga 300
 tgaataggtc aaggtgagaa atgagttctc cagtgtcatc cagcccttg atatacagg 360
 cagagatgga actactcctt cccaacccta taataataaa aatagtctac tctcctcatc 420
 ccacaccctt tcttgatata tctatgcaa atgcacagaa gatactttgg 470

<210> 543
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 543

gtttatgagc aggaaccatt gcttaagaaa tactcaccat caagcagaat catgaggac 60
 agagcaccat gaactcaggg agcaaagaga aactgtggg ggtattctta gggatggaat 120
 ctccacatca aatccattgg caagacctgg atgttcttgg aaatgtgaaa cattgaaaat 180
 gttgaacatt aatcttctcc tcactccag tatcaacacc caactgaggc caccatcatt 240
 tcttgggttt ggggtggacaa ttgcaacagc cacctatgac tgctgtgact ttgtctatga 300
 ctccagttaa tccatctcc actccaccgc ctgaatgac tcttcaaaat tcacagtagg 360
 taatgacacc ccagtggaaa atgctgattg ccttctactt agaataaatc ccaaattctt 420
 tactgtggcc tataaaaccc tcagtgcaat cctcaaaga 459

<210> 544
 <211> 479
 <212> DNA
 <213> Homo sapiens

<400> 544

atctgaagt caaccagga actgggtggc tcttggatg naagaaaana ttaaccatc 60
 agagttaaagt gttctagaga ttaatgggct tgctgttgg caaggtccat agacgtcctt 120
 tcttgccaat acaaatatat atattgtga agcacaagac tatatccaca gataggatta 180
 catgttaact gaaaagattc aaggaagaga agatgggcca tcaatgaaaa atggtgggta 240
 caatgaagca actgatttca cagctaaggc gagagcactg cacttctcc tcattgttcc 300
 tgggtgntaa actccacta agaagcatga aaaagagcaa gatgcactg aggagataaa 360
 gcagacctt gaagggaac caaacatcag ttcaagttgt aacttagaga ccagaaaaga 420
 tattccaagt tttgtgaag nttaaaatgt gctctttgt atggaaaaaa taaatcctg 479

<210> 545
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 545

gaattgcaag gggagctgtg ggcttgacag tgctggcagc cattgcaact gaggatggaa 60
 ttaacatgga acacaacaga gctggacgtc tgagccctaa ggacggcttt tgggatctca 120
 aatccagcta tgctgaaga cctaaagcta gaagctcctg tgcttttcag ttacagccag 180
 taaatcctct ttttggctt aagccagttt gaattgggtt tctacacagc ctgaaactgc 240
 tatgaagta aaggtagtgt tagtgctgga agacactgca tggataacct cctcaagggg 300
 ccaattcact ttaccacca aatgccctt ttaccgatc ctgtctact gctacctgt 360

ttgatagatt atgtctacca aaaataaaca aaacccgcat tgagaatc

408

<210> 546

<211> 422

<212> DNA

<213> Homo sapiens

<400> 546

ctgttattgt tccttgaaaa acagtataaa acaatacaaa cactcattga catggaccca 60
atctattctt gactttttaa ctgatggatc acattataat gcagaagggt ccttgccctg 120
atgctgaaaa cagacttgcg aagctgaaaa tgataagagt atgactttta gttttggaat 180
gttaagaaat aataactgt caaatcattc aatagatgac attgttaaaa catgaaacat 240
gaatatgttt cgctaaagca tcatcgtaca attgacaatt cttgtctatt ttactttta 300
tttgggcagc accatgaaca aacttgtggg gccccacgct ccagccacgg atggtgcatt 360
ggctgtgcct cactctgata atggccttcg tctgaatgaa atttcagtt tccaaagact 420
tt 422

<210> 547

<211> 322

<212> DNA

<213> Homo sapiens

<400> 547

cnaaactggg ggggggtctt ttaagccgag atcgcgccat tggactncag cctgggcaac 60
gagcgaaact ncgtctttaa acaaaanaag ctgncatttg gcccnaatt tngccttga 120
aaccaccacc gggaggggcg ttcccacaag ctccccgggt tgggggctga ccaattctgc 180
caggaaaact agggcgacat tcccaaatca tcccctgac agccctaatt ctactttta 240
agaaggntct tggtagcatg gaaaaccgca aatgcccggg aaaggcagat ttaccatgaa 300
agctaataaa gtttctaacc tc 322

<210> 548

<211> 406

<212> DNA

<213> Homo sapiens

<400> 548

gtgggggtct nttcangaag ggagggcaga aaagaaagaa ngganggtgg gantcaaag 60
cttgggggaa cacttgggaa gagatgggaa ttagaagaa gaagggtcc cgaaccagac 120
agggacctca agggcagaaa accaattatg gtcaattaac ttctcaact cagcaaatat 180
tttcaaatg gtcaagcaca tggaaggag ccatatgaat gacacaaaca tgactggaaa 240
cctctgtctg cctcccagag cttcgattcc tgcactgggg tcttcaaac tcaggtacca 300
aatggcttcc tccgagggga aaaactaagt cctgccagat gccctgggt acattacttt 360
gggtgccatt cttaaattta aattaaacta ctttatccc actatt 406

<210> 549

<211> 422

<212> DNA

<213> Homo sapiens

<400> 549

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gaacatcatt ctttctcatg catggtctgc agtgatggga actgaatgca ccagcagcag    60
ccatatgagc ttggaggcag atcctgctcc aattgagact cagctgagac tgcagcccca    120
gttgacacct tgattgcagc ttcataagat cctgaatcag ggaatccatc tcagctgtgc    180
ctagactcct aaccgtaga aatgcgaaag gaagagtaag ctactctcac ctgggagggtc    240
cagctggtga agaccacaag agactgtctc cagtgggaaa gaggcttgag ggagctcatt    300
tactgttcc acatgtgtgg tcacagaaag aggcacatc tatgaacaag aattcaggcc    360
ctcaccagac atcaaatctg ctggtttctt gaccttggac ttccaacct ctggagctgt    420
ga                                         422
```

<210> 550

<211> 330

<212> DNA

<213> Homo sapiens

<400> 550

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atttctcatg gaaaaggacg gncctggagcc ttgaacagg ggctgggggtc ttcttctgg    60
gtcagcaatg gggggnggaa aaccgaacgc ccttcggggg aaaggaggagg tcacccaag    120
atcttcaagt tcaccgaagt ggcagcctgg gattcaaggt cctgcctgc ctccagaac    180
ctgagctctg aaacgctgga ctaatcaaga acctcttggc ccttgaaaaa tgaggcctat    240
tgaacaaaga catttgaag aaaagggaact attacaacct agtgtaaagt aacaagcaaa    300
taaaaaatga aatggcaciaa ctctctccac                                         330
```

<210> 551

<211> 459

<212> DNA

<213> Homo sapiens

<400> 551

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tgtggctggg aactgctgta gctattctga gaccacgaga ggagtcactc ggaagggaaa    60
gccgacatcg agtatcgga gatgaaggga aatgaagaga cagcaactac ccgaagccct    120
gacggcatcg ctgggctgtc aatcaacct ctacttctc taacttgcaa ctacttcac    180
gggatgtttt tcctattta agccatttg agcagggtaa tctgttatat gtggttgaga    240
gcagccaact gctatactag tctagagagc taaaccagg cacccttta acaatgtca    300
gtcagagtgg gtcaggacaa taagcacaac ctgctttcc agactcctt gtctctctcc    360
ctgaatgctg aagaacaac ctcccttct ggtctcatc acactctac acacccatct    420
gcactaattc cactgtgctg ngatctgctt tgtatacat                                         459
```

<210> 552

<211> 472

<212> DNA

<213> Homo sapiens

<400> 552

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ccacagatcc atgatgtgca gttctcttgg agcaggcgct ggcttgtgct ggtcactacc    60
```

ttccacaag tacttccttg ccaagaaggc cgaacaaagg ttcaaacctg aagttaaagg 120
 ggggggaaaa tgaaagggaa actttcttgc accaaaggga agcttgcccc aagctttttg 180
 tgggggggaa gaaaaagtgg gatgaaggga ggggggcttg aagaaagcct gatgggcagc 240
 cctgggatga agaaacaagt gacccaagcc aggtgggacc ttccaggga gatatcctgn 300
 ttttctggc acttcatcac tgtcatgtgc aatgacttct ttcagggtt gccagaccc 360
 gacccttgaa acaaaactct tgactttctg ccatggatct cttggggcc cangactgg 420
 ggatgcctt gaagttttgt attcaataaa acttttttg gctggtgata at 472

<210> 553

<211> 440

<212> DNA

<213> Homo sapiens

<400> 553

gatgggtgtg tgtggcccat aaatcaactg gacgcacttc cctttgttg cacactgcca 60
 cgcacacagg ctgctatga agaagaagaa atttgtctga gaggaacta gaaaactga 120
 acgtgtacac aatgctgaca tttttgttg ctttaccctc tcttaagaat ttctaccatt 180
 cctttgagaa gtgattatt ttaaaactg tgtatcatt tgccttctg ggcaaattgc 240
 acagtcaatg atatgtttca cgcagtatgt aaatccctt tacatatctc aaaataatat 300
 ctaattaaaa tgtcaagggt atagctcatg aggctagagt ggacagggt ccacccctc 360
 cctcagctc tcaagtaac atttaaagta tgcctataa ttaggagcaa ttataaattc 420
 caattaaaaa gaacctgcat 440

<210> 554

<211> 516

<212> DNA

<213> Homo sapiens

<400> 554

cnnaactga gggtnagag aaatgagggc atngccnata acttggaggt tctnaagtt 60
 tacnatggga aagcnggcc cggtgccagt ggcattgccc tggtattca ccacaactc 120
 atggagatta aagcaggag ggaccttct gagcccaagg aagttttgag gnttcaagt 180
 agctatgatc atgccactgc acttccaacc tgggcaacca gaagcaaac cctgtcaatc 240
 aatcaaagca agcagaccaa gcaagggaaa gcaagcagca agaagcctt gcatgagctc 300
 atgaatggct gctgtgaaa attactgacc gtcaccagct gaataacang ctatctggag 360
 agtaaagcca gatgaaactg atgntaaatt atcaaatgta ccaaganttt tgggcttct 420
 ggccaaaacc ttattggga acttagaaga gaaaaactgg aaacnccag agctttttt 480
 taagcttctg agcccacang ctggtcctac atccct 516

<210> 555

<211> 407

<212> DNA

<213> Homo sapiens

<400> 555

gactctgggg agctcctgca ttaagagctn annngattng aacctnanng aanaaactgc 60
 ngannnaggg agnattgaan ctactntgtc cactggacct tgttcccang ctccgntga 120

agctgaacac tccgnatgat ctccctgcca ccatancang ctatgaagtt cattacacat 180
 gcangtaga gacaatacag ctctgctcc atttctgagc acctacggta agactgcat 240
 tattcagtgt gccancctgt ttccaagcct acaatgtata gtctctctag tacgtaaact 300
 cattttttt ctgagagagc cnagnagaga cacaggcagt ttcttttca aaatgtgcca 360
 nanattccaa aacaatctca aagcattaaa ggctatgtgc acaaagt 407

<210> 556
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 556
 tgaaaacaac ttgggagtag taatgaagat gaccagaggc cagcgagctg aaagtgttc 60
 cagcaaagca gccctctgat ccataactt tagctacaac ttacatcacc aaggtccata 120
 ttatatactg tgatatcca gctgcacagc gaagaatccg tcacctgctg acaaaaacaa 180
 atgatgctga gaggtttggg cacaataaag tggataatta tacacaggca cttttccca 240
 tgcagcattc ttaaggatg tgccagagta tcttgaaga tcttgaaga gctatgaact 300
 gatagaaata caatcttgga ttattttt aatcattgc tagttaataa aattactgct 360
 ttcaatgt 368

<210> 557
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 557
 ggtctcgctc tgttaccag gtggagtag aagtgggtgca atcatggctc accgcagcct 60
 caacctccca ggctcaagca ctctccctc ctgcctcagc ctctcaagta gatgggatca 120
 cagggtctta ctctacttg gaatatagat gggatggagc tgagtggcta agtacaagc 180
 tagaagcagc ctggctcaga tggtatata aaccgaaac tgtctacacc cagactttat 240
 tcttctacaa ccaaatcct caaacacaca atctgaacag tagcagtgaaggagggttta 300
 aggtgggggt gaggggagaa agggagtaat atgggtttta 340

<210> 558
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 558
 acatgccaag cttcagctga aactcaagcc tcatgcagtt ttctctgctt ggaatgttct 60
 ctgcccagcc ttacctgcc cagcttcttg tctacaggt ctcaagtcaa atgccttctt 120
 ctcagtgaag acttccttg cacttgctca acataaangt catctgggta ttctctctcc 180
 agcctgtggc ctatttttc taaagaactt ttcagaatct catccatac ttggtttact 240
 tgtttgaac cagtgtctct ctccagaat gtaagctcca ggagagcagc acttctctct 300
 tgatgttatt cctgcttcaa tcttagcgt ctagcccagt gcttaataca gatttgttga 360
 ataaagatcc gttaaag 377

<210> 559
 <211> 466
 <212> DNA
 <213> Homo sapiens

<400> 559
 gcacccagtg actttggcag cttggttaact ttaggaaaca aggcgctccc acccacgctc 60
 tcccacctct ttattctgct gtgtctgctg ccacctccag cgccttttca acgcttcctt 120
 ctaactccc ttctcatca gtgcatacaa agctttccgc agcatcaagt cccgatcatg 180
 gaaacccac attcctgtgg caaaaaagca taatggtgaa tggaggactg cttcaagac 240
 tcaccaaggg aggetgcatg caggaggcag ttcccatctc cagtagtgc caaaggaagc 300
 agcctctgag aggtgggatc cacactcacc caccagtcca aacgccctgt agaaacaaga 360
 tagtgganga aaangagaat attcatgaag cccttncctt ttctattttt gnaaaaaanac 420
 tcaaagcag cctccttag gaggcctacc cagaataaaa ccatcc 466

<210> 560
 <211> 455
 <212> DNA
 <213> Homo sapiens

<400> 560
 gatggtgggg aacatggcga gaccagtac ttccaagagc ctgtgcccat tgctgcactt 60
 tttttgctg tgaagtgaat gccttgatca gaacagtga acggcgcttt gaagactcag 120
 atacagtgc aggctaagaa gggagctgct gtgttttctg gggtgattgg tcttggtac 180
 caagggaata tgggctgct actccccgac ggagttacag gataccaaag agaagagtaa 240
 acatgacca agaaccctac gtctcttctt ggggaagggt tagtgtgtct ctggttttac 300
 ccaagatagt tgaatcaggt gcagagggaa ggaactggga gcacacagca agaaagtggc 360
 tgttcacaag ctangacctg ccctntggc ccttggtttt gggcnttcn gcctccaaaa 420
 ttggganaaa aaaataaatt tttgtgtt aagcc 455

<210> 561
 <211> 56
 <212> DNA
 <213> Homo sapiens

<400> 561
 atgtactat ccttcaagat ggtaattaat aaaagacaga aaaatgccta aacacc 56

<210> 562
 <211> 397
 <212> DNA
 <213> Homo sapiens

<400> 562
 aaagtttgt gactcatgac ctatgatgact gcaagagcct acaatgaagt ccctctgcaa 60
 acagaagcaa aaggcacagt ctgctctccc taaagatggt cattttctgc tgctatggcc 120
 cagtttgtgc ctcaaggac tgactgtgta aaaaagagcc cagaaactct tgaactgac 180

ttacagtggc ttcttcagca gtcagctgta acgatggctg gagcacctgg tacctgagtg 240
 agggccaaga atgggctctg catgtgccct ccctcaaca tggccacca cccatttca 300
 cacaatgca gtgggggatg aacctgtagg gatgggtaat cagcctgaaa ggaacaatt 360
 tgcataatgtg taaaatctga aaaaataaat tattatt 397

<210> 563
 <211> 358
 <212> DNA
 <213> Homo sapiens

<400> 563
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 atcttttgaa ggcttggaaa gaacaaaaat gtggagaaaa ggaacatttt ctccgggtt 120
 gagctgagac atcatcttct ctggccctga gacatcagag atcttgcttc tcaggtttt 180
 ggactcatgc caggactcat acacattatt agctccctaa ttcacagccc ttcagattta 240
 gactgaatta caccatcage gtttctgggt ctttagctat taatagcaga cagcagatca 300
 tgggacttct tggactccgt aattgagtag tcaattccta taataaatct ctccatat 358

<210> 564
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 564
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 gaagaaatgg agagctccca atgaccaggc attccaccga gcaacagggc ttactgcct 180
 ctgctctcat tgaaaaccac acagagcatg caacactttg ctactccaa aactttatga 240
 ctttctcan ttcaagcaa tgttgaatgc tgactcaata agatacaacc aaaacaact 300
 gttgatgaga caaagctgag ttatttttt accatggtaa aagtgaacgc t 351

<210> 565
 <211> 433
 <212> DNA
 <213> Homo sapiens

<400> 565
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 aaaccagggt cgaagcctc aaaacactca agttctctt tctacaaca gaccagcctg 120
 tgaatgttca ctaatttca accaaatgat gtgctgtaat caattacact ttaattactc 180
 aatccagaaa aaagcgatca cttaaataag cctcatggtc agagaatttt ctaaaaatt 240
 caaattgctt ttttcctta aaggaatgta ataggatgac aataaaagat cctcacgaat 300
 aaaaatatat gagaataaaa tcttggagt aggactgtaa taaaagcata actccaaaaa 360
 aaaaagggg ccngnggggc caattcagnt tgganttaac cgggntgaac ttgttataaa 420
 gggggggccc ccc 433

<210> 566

<211> 40
<212> DNA
<213> Homo sapiens

<400> 566
gtttgcatcg ccagcttcta tatattacgg ccttttttg 40

<210> 567
<211> 398
<212> DNA
<213> Homo sapiens

<400> 567
ggtgaatttg ggacccaaac agttaagcaa ccagccaatt tgcttcctg ctgcctccca 60
gccaaaggaga tgaatggaat gcacatgagg tcgcttggca ggcatccaca ttctatggg 120
aatgtgcag cagccagagc ttgggacat gaagaagcaa atgtgtggga gttatggggc 180
aaactgcaaa caatccaaag tcccgaaaa atgcatggag cctcttggc ccaaggatgc 240
tctgcagaac accggcaaag accctgccct tgcccaaatc aatgataagag gcaggactcg 300
gcactgccct gttctttctt actgtgcca aggcctgaa tcgtacaggc cacttncagg 360
actactgngg atgtgagcca ttaaaagaa ctcaaca 398

<210> 568
<211> 340
<212> DNA
<213> Homo sapiens

<400> 568
atataagaaa gattggagaa ctgtgtgcct ggcaattgcc ttgtgaaag gaagccctca 60
gaaaaagttg ttgatggtg agagctggcc aagccagaaa gacaaacca gcgactttga 120
gtgggggctt tgtgcacaa ggcatcagta gacctggaga ctgagttcag gcaatcaatc 180
aatcaatcaa tcaatcaggc ctacagaatg aaactccaac taaaaactgt ggacaccaa 240
gtcagctga ttctctggtt ggcaatactc catgcatatt gtcacacatc aatgccagct 300
ggtcaagtgg tagaggacaa taaaaagttt tcaccttgg 340

<210> 569
<211> 434
<212> DNA
<213> Homo sapiens

<400> 569
catcagaggg ctccttgga atgctagata ccaggaagaa agggaaacctg gttaaaaagg 60
aaaaaantaa aagggaagc ctttgnctt caccaattct tcaaggaacc aggaaggga 120
aaatatttgg gaaaaagtg gtttgggag ggaaaggaaa aagggccaaa agaaaantaa 180
aaggagggca ttaagtant cccgcttgca aaagcttgg aaaaagaaa gccaatggaa 240
agggatgcca cgtttttaa aggtccggtg ggaaagaang gaaaaggaaa aaaaatttta 300
agggaaaaag ccgcatgct tgaagaaaa aggggggaaat tantgggaag gaccaggaac 360
catgccaaa ggatccaagg aaaaaggta ttctcaagg gaaaattcaa aaaaggcctn 420

tttcccagga aacc

434

<210> 570

<211> 483

<212> DNA

<213> Homo sapiens

<400> 570

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tgatgataca cagcaggaca accagtcctg aaaaactttg caaaattgat cataccctgg    60
tgctcctcct ttaacagaca tggcagcccc tgaattccag atccagcccc gcctcccagg    120
tctgctctat cttcagcctt acaggaacct tgggcggtgt ctcctgactc aacctgtgt    180
gacaagaata ccagctttcc cccatctctg agcttctaac gtttttatg cctccccga    240
cttcaaaagt gttaagagtt cccatgggga tggtgaaatg ggccattcct gaatggtata    300
ataaatctca ccgaacttca ggcatgcctg tcatcagcca agtcctctgg tggggctgct    360
ggcatttgaa actgaggctt ctcacaatgg atttcaattt ntcgggttct caagtcaaac    420
tttaagttaa tttcaagggg tcactcttgt gtttaattagc tttganggg agagtcacaa    480
ata                                         483
```

<210> 571

<211> 676

<212> DNA

<213> Homo sapiens

<400> 571

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agatgggggt tcgcatgtt gcccaggagg ggcctcaact cctgggggctt caaagtggaa    60
tcttggttc cccaacaaca accaaccggg ccttcggggc ctccccaaaa gtggcttggg    120
ggaatgaaca agggaagccc ttctctttt tccaacccaa gccgggaagg gaagggaaga    180
acaaggaatg ccttttcaa gccttggtt gggcttgggt ccccaaggg aacccccaac    240
ttggcccact tggaagaagc cttgaccgaa ggttgggtcc gaagttgcca ccgccaaggg    300
ttattgttc caagcctttg ggaagaaggg ttgcaaaagt ggaccggtt ccttgaagg    360
gtcttaacgg ggcccccaaa atgggcaaga atgaaggggg ggcctcaa atccaaggct    420
ttggtcttgt ggggggggtg ccttccctt gggacacaaa gggaacttgc ccaaaccct    480
tgtggttga aatgtgaagc cttcaattg naaaaggaag aacaaggtg aagaaaagcc    540
ccttgaantt gccttgggtt ggcctttaa ggccttgct taaacttgn aaatacaaga    600
atnaaatggt ncccaaaagc caccttgggt ggggcttgtg gaagcctct tcaaacttg    660
gtnaaaataa caaaaa                                         676
```

<210> 572

<211> 390

<212> DNA

<213> Homo sapiens

<400> 572

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ttcaggaact gagtgtctgc cctggtcaca ttaaggagc caactggtct ggccttgggt    60
ggttangtag gaacatttta ancaagcctt tcttcnattc ttgggcaaan gttaaattt    120
gttcaaccaa aagccgcttg gcattcaggg aataaaggaa acccttcaa gccaaagcca    180
accaagtgga cctaagcctg gtggaatcct aaatggaata aaccctttc cattttcat    240
```

tttccattaa tttaagaat ttaataatt taccctttct ctttcttatt taaaaatggg 300
gggcctagtt tgcctcatg ggaaggagg tcattaatga aaaattattc ttcttaaaa 360
aataaaaata ttattcaaa atatttttt 390

<210> 573
<211> 606
<212> DNA
<213> Homo sapiens

<400> 573

ggattctacc atcaagaaaa gaggcccaaa ctttctattc attcatgggt gggaagggtga 60
angtggcttt ggagtggaa tggtaaaatt ggcagaaacc caactttgga ggaaagcttg 120
ggatttttc acccttgggc cccaataacc ttaccgttg ggccttgcaa aggaagccac 180
ccaaagcacc caagaaatca cattattggg gacctatcac ccaaaagaag aagaagacta 240
cttgcggcgg aaagaccag actattcgaa gaagctggaa gaagaaagaa ggttcccca 300
agtgggcttg aaagccttgc ttgtgcttg tattcttca tcaattgtgg gtgtttgtc 360
ctaccctgga ctgnggggaa aaataaantc gcttgtttgg gttaaagtaa atttaagcag 420
ccaaaagcaa ttgcttncca agccgaaggn cctccttgct ttcaaggaaa agaaacccaa 480
aaccacttac ccttgaaag gggccaggcc taagccctgc aagcccttn cctttgcang 540
ggaggccttt cctttgccc ctggggcntg nttntnaca aaaatcgggg gtcttggggc 600
ttcaaa 606

<210> 574
<211> 468
<212> DNA
<213> Homo sapiens

<400> 574

gagattctc cctctgcgt gaggatctca ctgtgcacct ccagccctgg gtcttggtgg 60
gctctgggtg cacttgaggt ctttggaaact gctccctct ggctctgctg gggttggtg 120
cgggcatcga tgtcacacc agcaggaaca actggggcca ctggaggatt cccaaggaca 180
caggttgctc ttctcatgca ggaagaatct gaatcgttc catccagtt ccccgcatg 240
cagcagaata caacacaagg ggctgcggtc ttcttgact ctaaggccc ttggaagatc 300
ctgttctgcc aaaatcaggg tgattgggc aagcatcctt agggctctgg accttaatt 360
ctttctctgg gtgattgatt gacatatang ngctctaact cacataagt gnaaaacaaa 420
atgtggggga aaggccttg anaccaaana caatgttatt gtctgaa 468

<210> 575
<211> 403
<212> DNA
<213> Homo sapiens

<400> 575

aaaaggctaa cattcttgaa aaagagaaga tgtatccaat gggcgcttt tctntggga 60
atcgagctgc cattcangg acattcactt gggccagaag atcgaccga catggctgct 120
caaacgaagt ccagatgcc acatacctgt gctctttgcc gtcataaac tggaaactac 180
gcattgtctc cgggatatcc tgtttttaa ttacacaac agatggaact ggctgaaact 240

ggacaacacc attggaccac actgggactt atttgtgatt ggcctcattg ttctgggct 300
gattttgttg cttagaaatc accaggggta ggatgcggat cacaggaaaa cctgctcaca 360
ggaatcaagt tcacttccan gnattcccca ctaaataaac aag 403

<210> 576
<211> 469
<212> DNA
<213> Homo sapiens

<400> 576

ggaatataga gggaatatga atgacatcac agcagctgcc tggagccct ggagcctgaa 60
gacatttgag atggatacac ctaaggagag gaggagaagg tggcaggcag atttgaaaaa 120
aatgtggatt accattaaaa aaggatttgt aagcaatttc agaaatataa tctccaagcc 180
tcaggaatta ttaccctt acttttaag aactggtatt attatactca taatgagagt 240
cataaattat gaacaagaag aaggttgggt attattattt gtttagtatt accagcctt 300
tcaattccac acaagagggt aacagaaaca aagctgtgag gatacccttg cagtgnaca 360
ttcttgggaa ttttgcattt aacaagggaagg gatcatca ctgnaaatat attttcaant 420
tggnaacaan ctgagactca taaatggnga ttntntgaca cataacaag 469

<210> 577
<211> 371
<212> DNA
<213> Homo sapiens

<400> 577

gcccacactg gagaagcggc aggcctccac tgaatggctg aggtccttaa ctctctgcc 60
agtcaatact gtctgcctgt catattgccc taaccttgggt gaagacactt gtcaaaatga 120
acagcgacac atgcttctga ctcttaaga actaacagcg gatcctggaa atggaagctg 180
ggtagtaatg gaagctactc tctacacaa ctgagatttc tgatcccaga ccccaaata 240
taggaataaa tgagctactg aaccacaaaa cccaacacaa ggtcacacac acttgtaaag 300
tggctaactg ctttcattgt ttgcataaa atgtgtattc tgcaaagatt attattaaaa 360
ataaaacaag c 371

<210> 578
<211> 345
<212> DNA
<213> Homo sapiens

<400> 578

aaattccagg ggactaatat tggagaatga accnaggctg ggananccan cctgcaaaat 60
tccaaaaagg acctcnggt tggtngtct acaaccagc catcgtcang ataacattag 120
actgcgttcc aggtgggacc atgactcaa ggatagcccc cagaccaagg gcccgggcca 180
cctaagcacc ccagcaccca ctctctggca tgctccac tctaagtcc ctttataaa 240
ccaccttctc cacaggtcga aagtttggaa atcgtctttt aagggcattg aagcttggcc 300
attcccagat ctggcattt gaataaagta agctctctgt tcata 345

<210> 579

<211> 501
 <212> DNA
 <213> Homo sapiens

<400> 579

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ctacttecta caggggtgag cccagggccc canggnagaa ctngtggccn cngccnnng    60
ttttnaaan ggcacnttn gngctcntta ctactagagg tencaataca gaatagggta    120
tacgtcgttg cgggctcttc agtcccaaaa agcaggggta tgggcatgc agggaaataa    180
agggntacag aagtggcttg acattatgct tgatggacat gctgtcttca ccccaaaaaa    240
agatgccagc aaagtctaaa actggaaaga gctttggaag atcaccaact taacatcttt    300
ggtattttaa agacggatga ataggtaag gtgagaaaat gagttcttca gtggcatcca    360
gccccttga tatcacangc cagaagatgg aactacttct tcccancct nttattatta    420
aaaataggct actntctntc atcccacacc ctttctggat atatcctatg caaatgccaan    480
cagaagatct ttgcaactgg g                                     501
```

<210> 580
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 580

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aaaagaaaca tggaaagaag ggtcagggag ttggaagagg agagaacatg acatgcgata    60
cttcacttt ctaaaggca aactacata agacatctgc agcgctgtgc tggtaacgc     120
tagattgggt gatgctataa tggaaatgga caaagggctc gtgtatcgga tgtaacata    180
ccatgccaag aagccatgta aatgcaccaa gagatcctgt tttgaagtc tctcttttaa    240
cacacagaat caaaatggca acatccatga tggagaagga agagggtccc cagcccttac    300
cagccaggag aactcttgat gaccttcaa tggggcagnc atgccttggc atcanaaacc    360
tcaagggagt tggcttttt tccattatgg ncatagtctg gtaacaaatc atctgtttaa    420
aaataatata taactcgagc tcg                                     443
```

<210> 581
 <211> 336
 <212> DNA
 <213> Homo sapiens

<400> 581

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agaagggaag agatgcccta caaagcccat gtatagtcac ccaacaaaat gtactggacg    60
actgccatgc accagccatt ggagctacta gctcctgaga agccacatcc tgactaaatc    120
agcagaagcc acgtcatcca gagataatgg gatggagaca ggggtgcctc tgaggctgag    180
gtgactccca tagggatggg tagctaaaaa tgaagcatag agtggcccggt tcactttca    240
tcttccccct ctctcgggat tgctttgctt tgctttacta tttggctcc tgagacaaga    300
agctacattc caataaagct ttctaatgg acactg                                     336
```

<210> 582
 <211> 483
 <212> DNA
 <213> Homo sapiens

<400> 582

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agaggctgtg atnctggaa tgttaatng gntggntgat tggacttatg cctttggtca 60
gcagctcaaa gaatgctaca attcactctt ctacaaagca gacatccagc cttgataccc 120
aaccagaac tctgaaagaa tgaaaatttg ccatctctag caggtggaat tatcagaggc 180
ctctggaagc tgccatggaa acaagctcac taaaggcttc agcaactgct cagatattta 240
attcaccca cagtgaatgt aatccaggca agaagtgtc acaatatgaa aacattgatt 300
agcaggggac tgcattgtga ccttgctggg tacaggcccc actttcttc tcttgagga 360
cgcttagctt gaacattcca nggggaaaga catcaaaaa gcatcgccac aaaccagntg 420
ggaagctgac caanaaaatc atgggttctg cccgcaggga ggaaacaca gggtaaatcc 480
ttt 483
```

<210> 583

<211> 294

<212> DNA

<213> Homo sapiens

<400> 583

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gactgaggct acccaacaaa ttcccagcc ttctgcagt gaggtgggag ccaaatgact 60
aaattctgtg tgttgagag ataatgcc aattctgggccc tgaccctat ggcccctgcc 120
atgtggcct gaagaagagg gtgcagtga ggatgctgag gccataggga atggtggagc 180
cattagacag agaagctggt cccagaact ctgcaagaag cagagtcctc cttcatcca 240
taatgaccac cactgaattg acagcacagg aaataaaacg ttactgtgtt agcc 294
```

<210> 584

<211> 66

<212> DNA

<213> Homo sapiens

<400> 584

```
nttggacnac tatngtggan ccantgggca ctngcngng aaatgcagag ctgaccaggc 60
atgagc 66
```

<210> 585

<211> 343

<212> DNA

<213> Homo sapiens

<400> 585

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accttgagaa catgcctgga ctaccgtgct ggaggaggac agacacatgg agcatagccc 60
gagtccccca cccggctcgc ccagcagaaa cggctctgga ccagccacca ccagccagct 120
cccaggcaca tgaaggagtc ccgccaagat cagcagccgg caagctgacc cacagccaac 180
tgcagacgca tgagcaagcc ttaagcagct gaaatccacc aagatcaact gaagtctcca 240
gttctgggtg ccagtatttc ttgtgtatg cccagaagta ttgtggtct ttgttaattg 300
attaattaat aatcatggat aatataacag atcattggcc aag 343
```

<210> 586

<211> 409

<212> DNA
<213> Homo sapiens

<400> 586

```
tgtggggagc tacactgcnt taagtcatga acngccacct tccgtgacgc tcacagccct   60
tnttgatgtc atccagctct tatccacnaa tctcagctc accatggaaa tgcggatttc   120
cccaccttea atctgccccca tcacaccagt gatgtttcag ttcactttgc actggttctt   180
ctttccaccc agaactctct tgtgccaggc ggaccacaaa cgagttctct aattaccttc   240
aactccttgc tcctatgtct ccatcccaac aaggcctacc cagaccttc aatcgactat   300
ggtaactgcc tgtctctcc ccaccaggc ccatctccag aactcccaac cccactatt   360
ttctccact gcttttctt tatagtactt tatcttttaa aaaggaatg               409
```

<210> 587
<211> 396
<212> DNA
<213> Homo sapiens

<400> 587

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atgcanaaac caggcccag ggaagacgca gcttgagcaa ggtcaccggc aggccatggt   60
tttggggag gaggagctac agtcagtctg ccttgagct caccaccgtg tttggcccat   120
ggtagatgcc cnacagaana cacanncgnt gttganggct cctgtnaagg anaanctgcn   180
ntacaagaag gttgagtaac tancccatca ctacagctaga actggccacc ancatggatn   240
ccanatagcc ctactccana gttgcccatt ctattanccg tgacgccatg ctggctgtcc   300
acacccatgc cttttcctg ccttaattct gcaatgattc ataaggaaa gcatattat   360
gacacagctn gaaggcagnc atctgcaagc caggac               396
```

<210> 588
<211> 410
<212> DNA
<213> Homo sapiens

<400> 588

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accagccaac acttacggaa aatagaacct acgttgaaat attgggggct ggtttctct   60
atacaagagg agtcatgaat atttatgaaa ggagaaatcg cacatgcaca ggatgacctg   120
cctgcagaag gagctaccca ctgaaggctn cttctctgct gagagctgga cactcattgg   180
gatgaactgc ctgtggaaag gagctaccca ctttgggtct ctgagagct gttctgttgc   240
tcagtgaagc tctgtgcat cttgtcacc ctccaattgt ctgcatactt cattctncct   300
ggacatggga caagaactca ggaccaaag gtgggactga aagagctatg acacaancag   360
ggctcaagat ttancagcca acaacnaaac aaaataaagc acaataaatg               410
```

<210> 589
<211> 335
<212> DNA
<213> Homo sapiens

<400> 589

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aagtccagg ggctaattct gagatgggca gaccaagcct ggagaccag ctgcaaaatt   60
```

ccagagatta tctcaagggtg gctagtgaac aaccagcca ttgtggagat gatgtcagcc 120
catgtccag gtagactgag acccaagaca gccactggaa tgagacacac agacattgta 180
ttcagtctaa ttcttgcatt ccttccatat caagtttccc cttttaate ccttgcccct 240
tgttttccc cccaaatca aagtgggtcac ttggatggg aatccagcca ctccccatta 300
ctagtttgg ttaataaagt cactttctt ccacc 335

<210> 590
<211> 405
<212> DNA
<213> Homo sapiens

<400> 590

gtgtctctt gacattgtcc acatctggaa ccagaaacct ccttctgcgt cctctatccc 60
ccatcccaca ttctctgcct ctctgtctgg aggaggctaa caccaactgt gcaagtctgt 120
tttctacaa gtcacactat gagaagatct gggcattggt tccccatcac ctgggccagg 180
actgactcta tggacctgct cccactcctg ggaaatgcgg agataggatc gtccagtatg 240
cctgctaagg ctgatgttca gattaaatga gatcacagaa gatgggcagc tggttgact 300
taaaggagct gggaaatgga gccagctctg ctgtgatggg tcttgatta ccaacacacc 360
ttgctgtgga ccttggggca ganggcactt caactccaa ttct 405

<210> 591
<211> 211
<212> DNA
<213> Homo sapiens

<400> 591

ctgtgtttaa caaaggctgt cgggggagtg actatgcccc agagtccacc atgagagtgc 60
tgaagagcca aaggtgatgg acccctctga tgcttccctg ccatcagtga gagaagcctc 120
atgtttatgt attttctatg ccgagatttc actcaatatt taatgtagag gagggatttg 180
gctgtctaaa ataaatacta ttattattt t 211

<210> 592
<211> 397
<212> DNA
<213> Homo sapiens

<400> 592

agatgaagaa attggggctc acggattaag tgacacctat ttatcatatc acacactaca 60
aaatctcaaa cacagtatct caactcatga aacattcggt cctaagatat caagtgcaat 120
ctgattccag cctgtgcatt ttgacaacct ttgactgctc tgccaatcgc caggtgcccc 180
tctccagccc agtcagtcgt ttctggtctc attcataact ctgccggatg cctcattaga 240
gaagtgtcct gagacttctt gtgagatatg ccttctgag acctaccaa tgtgcccatt 300
ctgactccta ccagacagct gagagaccaa ctcagagaag aatagcaaag aaagcagaaa 360
atgggaggct ttatccagtg gcccaatccc tgctagc 397

<210> 593
<211> 420

<212> DNA

<213> Homo sapiens

<400> 593

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ggacctggga gtgcgacatg gtggcctcag gggaaaaggg ctctcgtcta gaccttctga    60
ctgtcctctg gatcttcctg gtgtccatgc ggggctgctg ctctgngctg gccccagggc   120
ctttggccag tgtccatgag acccggaatt ccagcaacca gtttgacaac tcctacagag   180
aaacaggatc cacataagga tacagcttct tcatatccct gtccatgact tcacctgcg    240
ttcttcaac caaatcaaat ggtggtcagg gcctcttgag cccaggcctg caccgtatta   300
cattccaaga tggcattgaa agtaactga gggaaatcac caaaaagaaa gtgaaactgg   360
ggccgggttc ctggccttaa ctgatgacat tacctggga aattccttct tcttggtca    420
```

<210> 594

<211> 316

<212> DNA

<213> Homo sapiens

<400> 594

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gagtatgaag ttaacaaac aagagaagat gaaggaggaa aagaagaaga tggaggagga    60
caaaatttc agaagtgtt attagagcta ttacatgcc aatatctact ctgtgggaaa   120
agcaaattc acattttat caactctgta ttctacatc tgatcaagag atgttagaag   180
ccagttcttg agaatggcag gaccaccttg tggacataac ctgggtcggg gaatgactgc   240
acggagcaga gtctacctg tcaagacgtc agattatgat gtgaataagc aataaacata   300
tattttgta actcac                                     316
```

<210> 595

<211> 133

<212> DNA

<213> Homo sapiens

<400> 595

```
aanagtgtnt ggcatactat atgctaate aacaggactg cggtcttata cgangaggaa    60
nactctctnt ccacatgan aagacacaat gagaaggctg ccatctgcct gccanaagga   120
gagccctcgc tgg                                     133
```

<210> 596

<211> 397

<212> DNA

<213> Homo sapiens

<400> 596

```
gtaaataaac ttctgcctc atgactcctt cccttcttcc ttcttttca aatgctcaa    60
tctgtgttag attttaacat caagaaagaa ccctcatgct tggaacact gggaaccact   120
ggtgaagagc aagagccctg ggaagaatca ggatttact tggcctctgc cactgacgtg   180
cggcatgact gtggaccagc gacctgcacc tctgtgccc cagtttactc ctctgtgaaa   240
tgaacactca tgcgagatga tggctagact gtcaccaggt ctctatttg ctagtacggt   300
gccctctttg accagcagaa taaagatgga taggtgttct acctacatac agtcatcaaa   360
```

ctcatcaaac tgtgagcagg aagagagaaa agactgg

397

<210> 597

<211> 318

<212> DNA

<213> Homo sapiens

<400> 597

```
gtaatccaca tgccaaactg aatttaaaat tcttgattt attgtaagac agaaaagcca    60
aaaaaaaaat cacaacgag aattttgat ttcaaggaaa tgttcgattg tanangacag    120
gcnctggca aanangnga gggctatgtt aagatnnagg cnaaggtga antgntgctg    180
ccacnagcca agganacca cganccacca caagctggan aaggcaaaga aggantcttc    240
cctanaatct ncanaggaag ngtgggcctg ncaccacctt gantntggac ttctggcctt    300
cggnnctggc aaagaata                                     318
```

<210> 598

<211> 374

<212> DNA

<213> Homo sapiens

<400> 598

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ctgagaattc atttgaata ttgcagata cataaaactc caggtgtaac tccaagcaaa    60
acatgatgaa agagggaatt tggataaacc atggaatgat gacatcacat tgagcccat    120
ctggtataaa cattttgct ttctgcagt accagatgaa ggaaatatgg tgccgtgtgc    180
ttcttcagtg attaattcag gaaagccttt gctgagctga aatccaaaat aggaagaacc    240
caccttcac atgttaaga agcttgatg cccagggatg aactgcctt ttctctga      300
aggaaagaag ttccctga ccataatgcc aaagctacaa acacttacat acctccataa    360
tttgcactg aact                                     374
```

<210> 599

<211> 366

<212> DNA

<213> Homo sapiens

<400> 599

```
gagcttacag tccagcggag gagccaaaga agtaaaaaga gatctgcaaa atgaaagtat    60
cacaagagag gtcaactcaa gatgctattt cccatcagaa cagaagtcac ccttgactaa    120
aaccacaact ttaaacttgg cccaacatcc agtgccttgt cccaggggt gcaaatatgg    180
actgganagg accccaattt atctgcctg cctgaggtc tgggctggga tatagcccag    240
gtncatcta tctgagggg ccttcagat ggacacatgg acagccagtt ctggtccct      300
gacttactcc tctgtagtga aaacagactc agtaaacaca agctgaatta aactggccaa    360
ttgttg                                     366
```

<210> 600

<211> 240

<212> DNA

<213> Homo sapiens

<400> 600

gtcttactgc ctattagagc aaaggaagag gaaatctttg gctaaccggt cagagaaaac 60
aactggatta aacaagatac tcttcagac tgtggttgca aaaangcaac acaacttta 120
aaaatcttag tactaatttt taaaaatggc ttttaatttg ggggagactc gataacagaa 180
cccgaatac tgatgaattg tatgaacatt ttgttcagaa aaataaacat atattaccag 240

<210> 601

<211> 411

<212> DNA

<213> Homo sapiens

<400> 601

ttaattctca cagaaactct tggaggtagc tgcaagagct gctagggacc tcgattagag 60
ttattacata tggaccctca tgaatcagag gaagaacgag gcctggagtc atgaaggggc 120
ttaatgaag tcacaaggct cacggcagga ccagtatcaa aatagacccc aatgtgcggc 180
aggctcatca gtggaagtga cttaccctgt ctcagatgag gctttgtact gtggactttc 240
gaggcacatg ggagcctcgg tgaccaggga ccatgttgct attccttatt gtgtaccatg 300
ccagaaggaa atttataat cctgaaatac tcttttgat ggctggaaga aaaatattgt 360
aaattggtaa tacagagaaa atctgctaatt cttgtcaagg aattttggac a 411

<210> 602

<211> 233

<212> DNA

<213> Homo sapiens

<400> 602

gttcattgtg ctgaggaggc agaggggctga gttcttccat ccacgcctt caagtgtcag 60
gcggcttccg gttggacaag atggctaccc cagngggctt gtttctctc tggctctttt 120
ttctgtctaa gactcactcc ataccagcct gagcttggga ccattgtttt gctcctctca 180
tctcctacc ccagagctg acagatttag caataaaat ttacaagatt ctg 233

<210> 603

<211> 256

<212> DNA

<213> Homo sapiens

<400> 603

ttgtatcagc tgaagagcgt agaagctgtg ccatcccagc cattatgagc atctctcatg 60
cccagatctt cgtttctgaa tttctcttc cactagaaga aacctgaga gaaatggcga 120
gcctgagatc ctttattgca ccaaaagcaa ggaagtatgg aaggagagct gagggcttgc 180
caggacattg gccgacatgg tctctcactg gtcaaaactg ggatggttgg aacatcaata 240
aagaatatta atgac 256

<210> 604

<211> 290

<212> DNA

<213> Homo sapiens

<400> 604

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aaggctgcat ttctcaggca taagctcttg ccagccattc acggtgatta cggaaggtt    60
aagcattgtt gggactcaca aaacagctgt gtaagcatt actacctctg aacgcttcag    120
gaggaaagcc acattctcct gtggaaggaa atagttgcag gtgatacctg ctcccttcac    180
ctctgctgtg gagtgggaagc tccctgaagc ttcaccaga agcagatgct ggcaccatgc    240
ttctgtaca gcttgaggaa ccatgagtta aataaacctc tttctttat                290
```

<210> 605

<211> 404

<212> DNA

<213> Homo sapiens

<400> 605

```
gctgctggtc tgcaagtcca gggaccatac ttggagtagc aagccccag ggaaggacag    60
acttaataa gaagaggatc ccctatgaaa attccaactt gagctcctt gtccattcag    120
acattcatac aaataccaac tgtgggccaac aactgaaga ttccagtgc ctatccaga    180
aatctgact cctgttctg ccaactcct gctctgcgc atcaggtaat tcccagcaa    240
aggcaaagtg tctccatgag tcaactgcgc ccaacgctta aatggngttg gcttcttagc    300
tatgacaggg acatcacaga gcacctgggt gaggtgtca ctctatgaa taaccagctt    360
tcggccaaat gaaagacagc accaaagtca tcaccaactg actc                404
```

<210> 606

<211> 402

<212> DNA

<213> Homo sapiens

<400> 606

```
atgaggaaat tgaaatccaa agatattgat gacagaactg ctaagtata ggtcagcac    60
aatgcctgga tggaaattca ctccagaac cacatcttca ccacaaacat tgctgtcagg    120
gctctccagg ttaataacct ttgctgggtg ggttctccan aatcagctgc caaacagag    180
tctgagtttc aaggacttta ttaggatca agcctgttg aagacacagg ggaagctgaa    240
ctgtgagggc agcccacaga agcctccct gcctgcagg gagctctgga gtgaatactg    300
ttctgtccac cagagctggg cccagtgagg caacaagac caggccttg caccaccacc    360
tactcaaca tcaagctgtg tgggtgtcc taagaagggg tc                402
```

<210> 607

<211> 401

<212> DNA

<213> Homo sapiens

<400> 607

```
gcaaaacat caacggatgc tgacatcagc gagcaaaagt gtgatgaaga acggcgatt    60
gcatcgttc aaagtatctc tccatgagat acttactaat tcaaagggg acaatggcca    120
ggtgaagcct ggcagatgc acttacactg agtcatccat gtgccatct ccagggtgac    180
acggngtgcc tgtgacatga agcgccaagg ggaaccaat gtcattctg gggttcttc    240
tgcccaaac agtccatttg gttaaactca cnagagtgtg tgctgtcga ttagctgat    300
tctgtatggg tggggatttg gaccaccct tactactca aagtggggc ttgtacacca    360
```

gcagcagggt tacctcctta accccgagct tgtaagaaag c

401

<210> 608

<211> 242

<212> DNA

<213> Homo sapiens

<400> 608

ctgagattta cacggaacaa ggagggttgg ctatcggtac atgagagaac gttacccaag 60
gacaaagaag ttcacagac ttccctgga cccttggtgg tgcccagatg tctgcggtc 120
cctgtcactt aaatataaaa gacaaggcaa agctcgcata attctaagat ggttcttag 180
gacattggnc tgcttcttct tggtttctg gtcceccaaa ataaagtcgc ttccttcct 240
cc 242

<210> 609

<211> 284

<212> DNA

<213> Homo sapiens

<400> 609

agccgggctg attgtgtggc tgcagagaac cctggtgctg aaaccctcag gaccctggg 60
aggagagatg gctgccactc caaagaacaa gagccagagg gggatttgag ctggaaccta 120
caaagccctc agaaggcatt cgatgcctca ctggaatgcc catcattca catgtcccca 180
gtcccactt atccccctcc actcctatga cactgctggc ccagcatggc gtgctacata 240
caggtgggaa tctgtccata tcaataatcc aaaccatctt ttc 284

<210> 610

<211> 157

<212> DNA

<213> Homo sapiens

<400> 610

cttagaagcc ttctgcttga aaggacgctc acagcccttn ttgatgtnat ccagctctta 60
tccacgaatc cttcagcttg accatgggna atgcggactg tcccccttc gtagtggcnc 120
cagttagaca ctatntttt aaaaataaaa aagagca 157

<210> 611

<211> 345

<212> DNA

<213> Homo sapiens

<400> 611

gcattcatgc ngcctcactt gctgggaaat gatttcacac atttgagtt tccaaggaga 60
gtacagagaa aggagcttgg aaagaanatg ctctacaggg actttaatat gacaggctgg 120
gcatacaaaa ccattgagga tgaggacttg aagtcccccc ttatatatgg agaaggcaag 180
aaggcccgagg taatggcaac tattggagtg accagggggac ttggggacca tgacctgaag 240
gtgcatgact ccaacatcta cattaacca ttctgtctt cagcttcaga agtaccgcat 300

gangtttttg ttatatattt gngcaataaa aacattttca gcggt

345

<210> 612

<211> 429

<212> DNA

<213> Homo sapiens

<400> 612

aaggtagcta cttggaacgt tgacttgaga atttagaagc cgaatcaatg ctccacggag 60
aagcatgctg ggattgattt gtgatgtctg ccacgaatat aagattggcc atttggggca 120
tgaatgctat tcatggattg gatctcctaa gagcccgaat ttctgagaaa cactgaaga 180
cctgaccca gcgcttaatt atttctcctt tccaagcatt tctcatggaa ggcattcttg 240
atgaaaagac ctttggcagc gtgggttttg caggttgctg gagagccagt gggattgcat 300
ctttgcaga ggacaggctc ttaaggggcaa aatcgcttaa gagtcaaaat ggccttgaaa 360
attccttggg aagccgtcat gttggagcca accactattt ctcaataatt tcagcacaag 420
ccagttttt 429

<210> 613

<211> 418

<212> DNA

<213> Homo sapiens

<400> 613

cacactaaa gggcttcaca gaaaacactt gatggaatct tactagacta actgtatata 60
ttctgagca cactccaaga cctgggagag gcagaaagaa agaagaaatg caagtctaca 120
atatgagata caaagtttga atttactggg aaagcaaaga gaacacatcc gaacaaaata 180
agaagaagaa atggtgtgag tattgttgca ttgcgaatgg aatggagaac aatgaaatga 240
gggctagaag ccaaaccgag ggtgaagatg gtcaaaatga ggaagataat ttatctttaa 300
tcaaaaatat aataatcacc agaataataa taaccataag aggtcaggaa cagaagaagg 360
gtgaaaacag agtcaacctc aaangcaaac ctagtaccac agaaccaggg atggacaa 418

<210> 614

<211> 362

<212> DNA

<213> Homo sapiens

<400> 614

ttttcaaag acaaagatga aataaagaca ttacaaaaca tatagaagct gcaaaaatgt 60
atcaccagaa gaccagcatt aaaagaaatg ttaaagttct tcaggcagaa gaaaaatgaa 120
accagataga aaaacgtatc tacacaaaga agaagagcat cggatttgta gtcactcaa 180
tgcttctca tcaggaacct agaaagctgc taagaatcca tctcaccag catcaaattc 240
cacagcccta atgnatccag atatactcag aaatctacaa gtcattgtcaa cttctatgtc 300
tttacttgc cccaaactct gtgccaggta ccatgggaga tgaataaac atttcaaca 360
tc 362

<210> 615

<211> 195

<212> DNA
<213> Homo sapiens

<400> 615

```
cctactcaca agaagatggc aaagatgaag acttttatga tgatccactt ccacttaatg    60
aacagctgaa gccccttcac cttctgccat gagggaagc agcctgagga cctcacaaa    120
ggcagattct ggtgccatgc tcctgtcca atctgcagaa ctatgagcca aataaacct    180
tttctttat aaatt                                     195
```

<210> 616
<211> 170
<212> DNA
<213> Homo sapiens

<400> 616

```
gagctgaaca ctgccccgag aatgcaacag aacttcagct ctgtcccagg gtcgtcagcc    60
acagctccaa gtttcttagc atcagctttt tctgaacaaa atagtgcac ctgctggaat    120
cactactgta aactgagtat aaaggaaaat aaaccctctt ttcttatcc                170
```

<210> 617
<211> 98
<212> DNA
<213> Homo sapiens

<400> 617

```
atgcagcant aagatgcnat ctggaagcn caagacggac ctctctntcg ngagacatna    60
aacctgccag caccttgatc ttggacttic agcctcca                            98
```

<210> 618
<211> 270
<212> DNA
<213> Homo sapiens

<400> 618

```
gaaaatctct cacaagaag tcattctcta gccactgtga tatttgccac atgggatttg    60
agatttcaga tgaagtcctt atgccccgtg ctggctgggg agtgtggact atgagcatga    120
gagagagctg ctttctctgg gaacaagaac tgttggtca tccataggg tctggtctgg    180
ggtctggcac agcgtttcc tcatagtgat gttcaagaaa tgttgctaa atgaataaat    240
gagaagatgg atacagactt attaaaatgc                                270
```

<210> 619
<211> 418
<212> DNA
<213> Homo sapiens

<400> 619

```
gttgttccca tattttccat aagagagaca tgtgtcggct taaaagaaat gaaactacaa    60
```

tgggtgtgagg gaggaatctc gtgattgtta gcgtatattt tctgcattct acctgaaatt 120
 gtcaacgaag tgtaggaccc aggtcagtgc ctgttcata gtaggtacct aactaactac 180
 ttgaaagaat gaacatcact atgaggaaaag tacaccatag tgaccatttt acagatgagg 240
 aaatggaggc acagagaatg agatgttgta atgtgcacag ttggagagac cactttctgg 300
 cactcggata tgcaatataa tttgaaaaa ttaaactaca tgctcgagga aggattcaac 360
 attttccgga gaaccccgagc attttccctc agaagactaa aattagatcc tgttttaa 418

<210> 620

<211> 423

<212> DNA

<213> Homo sapiens

<400> 620

ccccttggtac ctgcctcttt ggaaggcacc tccggtcaca tcaggagcat ggatggggcc 60
 ccacctgcat acacatggag atggactcat cctccagcta ctttgatac cgtggctccc 120
 atttttctac ttctctgaa ggattgaagc caccttgccc agaagtcacc gggagttatg 180
 cctcctccct aaggatggcc cacagccagt gcctcatcgg agcaagaggt acagaagccc 240
 tgctccctca tctgaagatg gggcaggctc cgcagtgcaa tccatgcacc cgagctccca 300
 tggcatcaga ctgacattgc tggaaagccac agtcttctc agcttctct tccctgtcct 360
 gcttccctca ctcccttatg gttttctct gagggcactc ccttaataaa tcacttgcgt 420
 caa 423

<210> 621

<211> 205

<212> DNA

<213> Homo sapiens

<400> 621

gtttttctc caagtcttga ctgagactga gtctacatga caccaaaaca cccaaacgaa 60
 aaagaaaaat tcacttgaac cacttagatg ttcttcacc aaatccagat gtttggcagt 120
 gcagataata ctctggata atgagtgact cccctacaa tcaacacttt catcacactg 180
 cttaataaa aaaaatagtt cccat 205

<210> 622

<211> 418

<212> DNA

<213> Homo sapiens

<400> 622

aaagaaaaac ctatggaaag atcctgtgct ggaagaaagc atgaagtaat tcaaatgact 60
 aaaaggtctt aaacatcttt gccatcattt ataatgcaga ctctcatgctg agaagagcac 120
 tcgacactgc caccgaagtt ctgtttctgg tgtgttttg tcaattatgc tgatgccacg 180
 ggaccatgga acagtgccac tatttccaag agcaacagca aatcgaaaaa tcttcatgca 240
 atggtgttc tagaaaagtc tattacattg gtttatgctt taaatatagt taccaccaga 300
 gtagtaattt tccaatctat cctttaaag ttcaagtgtt ttattgcatt ttttaagttg 360
 naaaaaaat ggatggttca catatcctta acatagnata taaaagcact actcaata 418

<210> 623
 <211> 156
 <212> DNA
 <213> Homo sapiens

<400> 623
 aaacaatatac tgcctcttga gtcactgcca ccaaggggaat aactttacct ggaatatgga 60
 ctgggagctc aagccaaaag catggacaag ggagtcacag attacaggat actattatga 120
 cttttgcata aatataaaact cctattagat aaattg 156

<210> 624
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 624
 gcgtgaaaga cgctgaacaa atccctgtca gctgcacagg tgcctttgta acacattgcc 60
 agttagcgtg acaatgcacg ggaagcagct atgctccagg ttgtgctcca gctgctcagc 120
 attgaccctg ccccatgccc tctgaagaag cagctttgcc gaaagtggag ggccagcaaa 180
 gaaggaaact gaaagcaggt gtccagggtga tgaaattggc acagaacacc aaaggatgga 240
 gctgagattc atgcctgggc tgcctcccca caatccctc acgttgaatc caaccctgac 300
 ttttgttcc caccgaggaa agaagaaagc caccacccc agtgaccatg gcctctaact 360
 gctctctctg cctgtggaaa gccagtggtat tgggctagga tacaatgcc ctccatcgat 420
 ttt 423

<210> 625
 <211> 263
 <212> DNA
 <213> Homo sapiens

<400> 625
 gttacacac actaaagggc aatgccatta aaggagaaga ggaactttgg aaactgctgt 60
 ctgaaaggaa agcaaagcac tcttcattaa cagctagtgg gtcctaatt tctgcccag 120
 aaggcatgtt catactgaca gagcaccccc tcaaggggaa gaaccatccg cgtaattct 180
 tgttgctc tctgageta gtgtgtcat tgtcatata aactagtgtg tcaacattaa 240
 aacaaaaagg gagttgaatc aat 263

<210> 626
 <211> 411
 <212> DNA
 <213> Homo sapiens

<400> 626
 taatacacia tattggcaac aatgcaacaa aatggacaca ctctactctc cagcgggagt 60
 ttcagaaata tgccataatg gaacaagata actaaaagaa gaaaactacc tcaaggttaa 120
 aaaaacgaaa agaagagaaa gaaaaaagga aagaagcaga aggaagaact ctgctgcagt 180
 actggaagca ggcagattat ttaaattacg gtggtgcat ggaacaagag aaggcagatg 240

aagagcgaca cccttcaagt taacacagga acaattaaca atagaatcct taagatgcaa 300
aactccttgc tgtttaccag caccagaana gaggaagaag nggntctggg ggaattgcgt 360
gccantctgc ggcaggttgg ctggaaaanc anccctgggt ggagcttgg a 411

<210> 627
<211> 121
<212> DNA
<213> Homo sapiens

<400> 627
aattgtatat ttccacatat gctggacaat aggcagaaag tggagacca aagaacttgt 60
gatatgacgg acatgagaag cttcagttgg cctcaaatgt caaataatat ccttcctgaa 120
t 121

<210> 628
<211> 196
<212> DNA
<213> Homo sapiens

<400> 628
gattagaggc ctctaaaaa gagtgtcttc ggagctcact gtcttcagc catgggagaa 60
tatagcagga aggaagcagt cttcaagcaa agaaaagtgc tcgtgaaaga agagctgaac 120
cctgctagaa tattgatctt ggacttcca gcctccagaa ctgtgagaaa ataaatttat 180
gttgtttaa ccatgt 196

<210> 629
<211> 161
<212> DNA
<213> Homo sapiens

<400> 629
gagcagatac tcagctgaga aaagtacgaa aacagatctg caaggacatg cagtggaaatg 60
tgagtgtttt ggctgggaag ctcacaatga agaacaatt gcaccacaga atggctggaa 120
aagtaatta aagcaacctc accaataact cagccagtaa c 161

<210> 630
<211> 444
<212> DNA
<213> Homo sapiens

<400> 630
cnaactgaga ttttacacaa tgtgtcaaa ctgtgctgga agatgacctt tccaagaat 60
gggatgatt cattctctg ggaggaaaag tcctattggc aaaggattct tcttccttg 120
tatacatgtg tcactgaaga tcagaacctg cactctacgc acaaaagcaa cagatgaatt 180
ttacagtgc tataagtttt aagcatatag gaaagaaagt ggaacagtgg ncagagtctt 240
gggtttggcc tcagcaaaat ggtgcttaan agtgacagcc ttggtgntaa cagataatt 300
tcaaaactca caaaaccatc aatnangaa tcnntgngt gccattctc atccattggc 360

aatggatcag gcaactgtta gctattctaa gtgaaatTTT gtgaaattc aaattcagtg 420
ctttttaac caatattaa agtg 444

<210> 631
<211> 421
<212> DNA
<213> Homo sapiens

<400> 631
gtgggggtctt ncatgagana cncataagcc tctggnana nctnccanaa ttgtcaggat 60
tctncaagat gatngggcng anggtatttg aanacantga gttnnggaggg ggcacacagc 120
tgagaaagc tcaaatgtcc tgatgccaan aagttcattc atggaccatc caccctnctg 180
tccacacacc cagtggacgg agacagctgc cctctgctaa ggattccgc atgggggaga 240
gcctggctgc tgtcgagcag tccccttct cccacctctt ccaactaggc tcttgagaat 300
gtcagctacc acacagccac agctaccaca cacctgcttg aagaggagac accaggacac 360
ccatcaaaag ccagaactgg catctnccct gtgggaagtt cttnctgtt taacctcaat 420
c 421

<210> 632
<211> 246
<212> DNA
<213> Homo sapiens

<400> 632
aaactgaggc tctcccctag actgtgagca gcaaaaggaa aacaacccca cctgccttga 60
ttcagatgtt ctctatcac cagcacagt cccagcacgt gggaggtatt caactgctgc 120
taactgttga acaaacacgc cgggtcatct gcaaaatgac tgtcctggac tctcaaaaa 180
tgtcaactca tgggagaaaa aaaggctggg gaatcattct tgattaaagc acaccaaaga 240
gacatg 246

<210> 633
<211> 165
<212> DNA
<213> Homo sapiens

<400> 633
attggactac tagagtgaag caaattgcc aattgtggag aaaagcaagc tcacaagaaa 60
gagcaccata tgtgttatt taagaaactc ctatcttta aatatttaa tacagtgtt 120
gaaccttatt tgtattaggt taataaaaaa acaaattcc atttc 165

<210> 634
<211> 323
<212> DNA
<213> Homo sapiens

<400> 634
aatgtttaca ctggagtc agagctgccc tgtaagaag ctcaactacc ctgaggtcac 60

catgatgtca ggaagccaaa ctcatggaa aggccattaa gtgggtactg cacttgacag 120
cccagtgtca tcccagcaa acagtcaaca ccaacagtgg gagagtgtc ttgaatgtct 180
acaccagtct aatcttcaga ggacagcagc tccgtgacat ctgactcaa ctgcttgaga 240
gatcttatgc cagaaatacc cagccaagct ctcccatcat tctagcccc aaagaattnt 300
tagcaaaata aaacagttgt ttt 323

<210> 635
<211> 105
<212> DNA
<213> Homo sapiens

<400> 635
aatcctgtc tngagcatnn gctnnacct tgtgtaccna gtcactctgt tgctgctgtc 60
ggtacagatc gcttcccaa ggaaataaat tacatttcat tctct 105

<210> 636
<211> 414
<212> DNA
<213> Homo sapiens

<400> 636
gaatgaagat aaaatcaaga catcttcaga tgaaggaaaa ctaagacaat ttgtcatcaa 60
cagaccgact ctaaaagaat gttcttccaa cataaatgaa atgaattaag aaggaaattg 120
taacattaag aatgaagaga taactatgaa aagagccaaa aaatggatca ctaaaacaaa 180
ctatctttct tctctgagt ttctaaatt atattgagac agtcaagaa aaattacatt 240
gtctgatgtg gttctcaatg taagtagagg aaatatttaa gcaacaatga tataaagaag 300
agtgggtaaa gggacctata tccagataag tcttctactc ttacttgaa gtgggaaaat 360
gcccctagca gagtgtgatc aaaatataaa tcagattata tcactttctt gatc 414

<210> 637
<211> 386
<212> DNA
<213> Homo sapiens

<400> 637
aaataagtat ggatggagag aggggattat agcagagcga atagtgtga agtcttggtg 60
gggacattcc gatttaataa ctttggagac agaggatgtg ttccagctca cagacttca 120
ggaataatac tggaaattga catctaata gcatcttatg cactataatt gtgtaaactt 180
ttaggcctgc tgtacaataa tcttccctg ctgtgtggtg agcactttgg ggcctctgg 240
atgctagatg tgatatgaat gggaagcatt attattattt atgccttata atatgtcaac 300
tctatgtcct ctgccacaac ngacacttat tcaaatgtg cagtaacagc cccaagtga 360
tgtattggca aaatattttt gaaacc 386

<210> 638
<211> 185
<212> DNA
<213> Homo sapiens

<400> 638

gacatcaagg gctccagaca ttgagaaatt ttccctttaa gttgcatgg gaatccagaa 60
aacgccatat ggaccctct atgctgtgaa atacttcagt actcaggaga agtcacgttc 120
tggttgctgc aagcgtgtga taccctgtca ttaaaataag aaatagattg ttatcctctg 180
ccaag 185

<210> 639

<211> 93

<212> DNA

<213> Homo sapiens

<400> 639

cananctgtt nnntcaaac tgatnnnggc nactgaccc tgaaaaatgg ctgagctaaa 60
ataaaagctg tgttataac gctgaaacga aat 93

<210> 640

<211> 267

<212> DNA

<213> Homo sapiens

<400> 640

gcctcacttg tctctcagc tatcaagata actgttgggt atgaaaactg aactctgtct 60
tagagggttt cttttccag aagatgcag tttggaattc tgcaagaact cctgatcact 120
ttaaataccc aatgccttta tttcaagat gtacagtttc tgtctttat caaatagagg 180
agcaaatct attcttcaa aaaaaggaaa aatgcacaat atccaaataa atttcccca 240
gctgcttct ggatattgga attagat 267

<210> 641

<211> 324

<212> DNA

<213> Homo sapiens

<400> 641

gcccacatag aaaagctgtc attggcctcc gggtcaggca agagatggga ggtgttcaga 60
gcagcaaacc ctacaagatg ttggaggcca ttcacaagca agcgctgct tggaataaa 120
cgtgggataa gaacaatgaa ataattgat gaggaagtgt ttgtgtaca tgaatactc 180
acgtcacaaa atgtgcttct acattatgta acttcatgg tcaaatgact ggtacatttt 240
attcctgtgc taatttgtca attctgttcc aagnggaaag agtctaact gactttcaa 300
aaacaaaaca agacaaaaca aaac 324

<210> 642

<211> 311

<212> DNA

<213> Homo sapiens

<400> 642

agacgagggg cctcgtatc ttgtccaggc gcgtctcaa ctctggcct caagccatcc 60

tgctctccag cctcccaagt agctggaatt acagaaattg aagaatcagt tccagagaga 120
 tctcctggag ggcctaggat cacagagcaa agcagaaacc acagctgtct cggaggacga 180
 aactccagct cttcacccag agatagtcgt gggctggtgg cttcagggcc cactagggcc 240
 ttgttatga gttttctctt cccagcggtc cttttattgc ataataaata aaccttgac 300
 agaaataaaa g 311

<210> 643
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 643
 gataccttga ctccaactca gtgactacaa agaactgcaa acaggtgtga aaacaagcaa 60
 taggtcatct ctggcattac ctgggaattc aagttcagcc ctgcattctc cctctgggca 120
 attctggtag agaccatgag gcaaccctg ggaggagcag tagccataac aggatcccc 180
 cacagcaacc ccagggctaa gaccagtggg tgcaaaacac cttctttatc aggtgacgcc 240
 atgcctcaa ctctgcagt ggtcaatatg gtcaatatta agttcacaaa catgggaact 300
 tcctgacatc atcacagaag gaatgaaaat gcagttgggg tggctggtac attttaaata 360
 aaggctggtt ctctggggag ggaaaagggg ttttttt 398

<210> 644
 <211> 281
 <212> DNA
 <213> Homo sapiens

<400> 644
 atcatttact ccaggaaga ccagctgcca tgtcacgtgt agtcttatgc agatgactac 60
 atgataagga actacagcct cctgccaaca gccatttaca ggtaatagaa gggagccaga 120
 agcagttctt cattgctaca ccagaccag aataagggtg gactcttggt atcatcctcc 180
 ctttctcaag agctggagac cagatcctac tgaagagtcc aggtctacc atgtatgaac 240
 aagggttaact ttggaaaaat tattaaaact ttccaggcct c 281

<210> 645
 <211> 364
 <212> DNA
 <213> Homo sapiens

<400> 645
 gtttgcagag aaccagcagc ctgacaacca gccatctctc ctcttgatac cagtgttcaa 60
 gcaggctgaa ggtcagaatc ttggcagttt gtttctaga atatacaaca tcagactgtg 120
 cttcttaaaa gtccaggaga gttctttac gagaagattg gaacttgata gagcagaaga 180
 tcagctgaac gctggaagac tcaccagtgt gaaatgttta ttctaggat cttctgttca 240
 accttggagc cttcagagtc ctatgtatag tcttaaactg ctgatctaaa aatggtgctc 300
 tgtttcagca ggtaattaat gatgttacac attttaataa aatttttcag ctatgcgct 360
 acct 364

<210> 646

<211> 403
<212> DNA
<213> Homo sapiens

<400> 646

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gacacacagc cctctgaag aaataactca caatcttct gtgcccggct attgccagac   60
ccttggtga taggagaatg gatgttagct gactgcaacc ttggcgttat cagtactgcc   120
tgtggccctc tccagcacac agcacaggcg ccgtcctata acatccccag caagccctca   180
ttctttgca gtggctcctc cettgctgac ctgccccttg ctteggctcc tcccttgctg   240
acctgccct tgttcggct cctcccttg tgacctgcc ctgcttcgg ctctccctt   300
gctgacctgc ccttgcttc ggtcctccc ttgtgacct gccctgtgct tctgtgctat   360
gcacatttc tactttctct aataaatctg cctttctta ccg                       403
```

<210> 647
<211> 428
<212> DNA
<213> Homo sapiens

<400> 647

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gttgctatga cagccaggaa ttgcgaacc aaaccagacc tggagaagaa gtctctcctt   60
ggcccaaaga gttgcagtt ccaagtgggt ctgctcatgg ttctgttgt cttcttgac   120
acctgccaga tggagaagcc tctaaacctg ggatttggaa atgtccaac agaaaggcta   180
ttccaagct ggctgaagct tggaaataaa ttcgacggaa ttaggtgtg atagaaggaa   240
cttcttgga agaaaagctg gaaaatatta caataggctc cagagagaac ctctattct   300
tctgaaaaa attctatat ttgttagtg ttctgtggt tgctaagcac attcacataa   360
attatcta tggatctca catccgctg gtgaaggagt aaagataggt ttcataatat   420
ttgaccaa                       428
```

<210> 648
<211> 26
<212> DNA
<213> Homo sapiens

<400> 648

```
tgagtgaag cagcctgagg acctca                                     26
```

<210> 649
<211> 161
<212> DNA
<213> Homo sapiens

<400> 649

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ccctgtaca tctccttca agatagaaag aagaaaccct aaacacagag aatgcaagaa   60
gcagaagagg gcccatctt tacagcgatc agctagcaga gtcaaaaagc ctgtgtggag   120
tttcaacaa agcagaggtg caatttctt tggaaaaaaa a                       161
```

<210> 650

<211> 295
<212> DNA
<213> Homo sapiens

<400> 650

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gcacatctgg ataaaggcag aaacaaagta acaagggagg aagtcacagt aaaccaatct   60
ttttctccc aaacacatat ttgggggctg acatcatagc cacatggcac aaactacaga   120
tgaaaaagta tctgaactca aatccggaaa cttaaccttt atcagatgaa gacaagaaag   180
acttcagcag gcaaaactcac acctgttggg ctgaggagct agaaatcaac aaccaaatac   240
caacattact gctctggaaa taactctgt tagaacaata aagtaagatg agggc       295
```

<210> 651
<211> 409
<212> DNA
<213> Homo sapiens

<400> 651

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atctctctta ceggggggatg caccaaagcc cagctgttca gtgtcaatgg ctgccagctc   60
ccaaactacat cccacacaga cgggagccac ctcaatgtct gcgagatttc ctgtccctcc   120
tttcaatcc catcaaggca cctctacca atgactgatg gatacaggga tacaaaagcc   180
cagacaccta tctccaaga ggaaaaaact ctgtggtggt gccatttatg ttccagagca   240
actgcgggat caagctgagg gtggactcca gctgaaacca catgcaacag actgaatgct   300
tgtgccctcc caaaattaat atgttgaage tctaatacca atgtgatgat ggtattaggg   360
aggtaattgg gtcataaang nggatcccct gtaaatggga ttgcactta       409
```

<210> 652
<211> 309
<212> DNA
<213> Homo sapiens

<400> 652

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gctcatagat ggaaggaact tgccttgagt cccagtaag aactggatt ttggacctt   60
gaatcaacga tggaaagtt nctgaggcct cccagaagc agaaaccgct atgcttcct   120
tacagcctgc agagccgtaa atgagagaaa atgcaactgg aaaactggct tccattctaa   180
gatatttaag caaganaaat aatcatagtc tacataatca cagaatagct tggaagaaga   240
tgctactgag tatgttacac aggagcttgt gatcaaatgt aaataaacag gtaacatgga   300
cttgggaaa       309
```

<210> 653
<211> 434
<212> DNA
<213> Homo sapiens

<400> 653

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atgtctcaag gaagtggatg ccaggaatga tgaatcactg aagcctgttg ggggatccac   60
actcgaggca cagatcatc aatctttgag agtaaaagga tggatcaaga ccacaggaaa   120
gaagggatga agctgtggag agtgaggatg aggaacattg cagatgactg gaggccagct   180
```

ccctgacctt cccctactgc cactgctgca ggccctggtc aggggaagta aaactgacac 240
tagctgttta tcatgcttta agaccagaaa gtaaatgaa aaccattacc acctctcagg 300
atgcaagaag gcacaagaaa ggactaaacc agtgaagat gttatctcaa tggaagaagg 360
aatcctaatt aaattgaagt cttaacaaaa agacgggtcta ttccacaaga ctgatagaga 420
catatacttg atga 434

<210> 654
<211> 407
<212> DNA
<213> Homo sapiens

<400> 654

caccangata actgatccaa gtcacaagca aacactcaac ggaggatgag catccatcca 60
gccacctgtc ttgctgtgct ttggagggtga cgcctggctt ntcccagcag cgctgatgga 120
tctgatgggtg attcataacc aggttgcagc cttagtccc gtcacagtgc ctggggaatt 180
ggccaccgtg gttcaatga ctgtgtcccc gtcttcancc gtgaggaggt aactggtggc 240
acccggcact gtagccatt ctacagngat actgttctg agttttgaat atgcctgac 300
aatagtgggt attcaggag ctgaaagagg ttttagagt gtacattaac caanatacct 360
acgaggatga ctcttcat catttactc tcaagctaa atctata 407

<210> 655
<211> 234
<212> DNA
<213> Homo sapiens

<400> 655

gtcngggag actttcatct tcaaacttg agagagagct gagaagcctc ggaaccgtcg 60
ccccgtgcc cccaaccac ctccggatc cgcgaaacct acaaaactgg atcaccagcc 120
gtctcacgcc actactgcct gtgccaagaa tccaaactc tactgattc aagcctgtct 180
ttttccaaa gaaaaagtc ttatctaacc aataaacaag ctgcttccc tagc 234

<210> 656
<211> 422
<212> DNA
<213> Homo sapiens

<400> 656

cacnacctgc attaagtnac naactgaggt tgatcccagg agaaaacatt ctactcctca 60
gcatgggtct tgcctgattc atttaccac tatgacactc tcaccagag gcataccaag 120
aaaggaactt gagaaaacca ttccagttaa agcaagtga cccggcacag tccaaaatcc 180
gtgctatgca gcacagtcca aaatccgtgc tatgcagcac agtccaaaat cctgtgctacc 240
cagcacagtc caaatccgt gcagagctcg tggcacagag gaaaatggac ataaggtagc 300
ggtaacagge tggcgactgt ggcttttaca cattgcttca cacaaccctg tccaggagct 360
ttacacactc actaaacaaa cagaagacac catccaattc actggagccc cgttgataa 420
at 422

<210> 657

<211> 333
<212> DNA
<213> Homo sapiens

<400> 657

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acgctgtgct tggctctacc taaaatacaa aatcaagacc acccaggccc tgctctaagg    60
aagtcactct ctagaaaggg acagagacat gctatcagga agaaaactga atatccttac    120
attgtgaggt cagatgtatg gctttcattc tgaatgcagt aacttcaa atagacacgt    180
gaacagaaaag ctttgaaca gaaaaacagc attgttctgt tagatgacta tagatagtat    240
ttcataaaat acaagaaaaa cactcaaaat tagctccaaa aaatgtatga aaggtgatac    300
tctgatattt aataaaactg aacctctcac aac                                     333
```

<210> 658
<211> 411
<212> DNA
<213> Homo sapiens

<400> 658

```
ggacaattgc ctttgaatga agaatgacag agctctggct ttcgctgacc ctgcaactc    60
ctgcagcgta atccatggca actcgttact acggcaacca aggaacatgc accagaccag    120
gataaaaccg tgaatctga tgcatattt tcataagaca taattgcaaa tgatattcta    180
aagcagattt gttaaacgtg tgatctaaat tataagttaa gttggaagtg attatgaaac    240
cttcattggg actaanaatt aagggtctgt gtcatgcac tcagtgattg ngttcatgca    300
ctcagtgatt ttattgagca cctactatgt gtggcacacg gagatgaata agacatagnt    360
tctcatgnet attctcccc tcagccccc tcacctcttg aacagacata a               411
```

<210> 659
<211> 398
<212> DNA
<213> Homo sapiens

<400> 659

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tcagaaaaaa agtaaccaac tggcccaaac agcatgaaag aacaccaggc aaaaaataga    60
agaaatatac cgtatcatca aaaggtgcgt ctgagttgaa gtctctgttg aaaaactgct    120
tattagcctg aagaatctag cagggtcatc agaagacttt tcacaccagc ttggttcagc    180
tgtctcagat gattgtactg ccaagaagct cctgtgattc ccagcttggt cccctttgta    240
gaaggccacg tcttcttaac ctaggaataa atgaaactga acagatgcct atacccctt    300
gtgatatttt tctgtgacac ttaacatact ttgaaaagac cagggaaatg ttctatcaa    360
agaataacag atatatccac ctgaagcgta tcggcata                               398
```

<210> 660
<211> 211
<212> DNA
<213> Homo sapiens

<400> 660

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caaactactg ctttgtccat gaacaccttg tcaacttcaa agattcactt ctgttgaaa    60
```

taaacagcat gagcagaagg ctgccaagtt acagaaaatt tgaagattct tgaagattct 120
 ttgatgacaa caagcttggc aggggtggctt ctgtatgttg aagtgtgaa aaggcngatt 180
 ttaanggggtt ttnaatggaa aaggggggga g 211

<210> 661
 <211> 86
 <212> DNA
 <213> Homo sapiens

<400> 661
 ataanaaaac caggtntgcg gggaaattga gacttgaact cangnctggc ggactgcnaa 60
 gntgacacct gtctgtctaca agcaag 86

<210> 662
 <211> 320
 <212> DNA
 <213> Homo sapiens

<400> 662
 ccattgtctg ggagttttgg aaccactgac tgactcttcg agcaccaggc ttctccttg 60
 gtctcagca ctgggtgggg agccctacat ccagaagtc ttgggaaaca ggggtggagcg 120
 gaatcgcta tcacagccaa acaagactct ccaggaggaa atacagcaga gacctgtctca 180
 gggcttagca aacagtgaca aaggtgaggt gaagccagtc tggacgcaca ccagttcggg 240
 atgatctgag gaatgtcagg cagtcctat atcctcagat gtgtncctat ccacctggca 300
 catgtctgga acttccatt 320

<210> 663
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 663
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 gatgtcttga tcttgactt cccagccttc agaactggaa acagccatga caaaatagag 120
 gatgaaaatg ttcaaaagaa ggggataact gatgaggagac aaaagaattc cactggaaat 180
 ggcaactaca gctggaagag tgaagatctg attaaggaag ggctggacca tcagcgttcc 240
 tggcattgct ttaccccaa caggacttga cctccagtat ctcttttcta ttcacctgt 300
 accagctgct gtctatatgg gctgaaattg tgtctggtt tgctcatcat ctatagcat 360
 atagcaggag tgtaataaac aattgc 386

<210> 664
 <211> 249
 <212> DNA
 <213> Homo sapiens

<400> 664
 gccttaggtt ccagagcctt accaggatga gagggctgat ggtgacagtg gcagtgaccg 60

gaagctggga gcccttccca aagccctgg agggaaactca ccactagcac gaaccgcaa 120
 ggccctgggt gccagcctag tgcccgcctt aggagactga catggaaggc tctggcttc 180
 agtcaaatgc catctcactc attgcctct ccttctttc tttccagaa ttaaagctca 240
 taggatgat 249

<210> 665
 <211> 278
 <212> DNA
 <213> Homo sapiens

<400> 665
 cttatatact ttgatgaatc aagctgtcat ttanagagcc tcgtgggaag gactgagaga 60
 ggtgtctagc caacagccac tgggcaactg aatcctacca acanccatgt aaatgggctg 120
 ggaagcaaat ctttctcagg cttgagatga ccacagcccc ggtcggcacc ttgattatag 180
 nctgtgaagt ccttgaaagc agaaccagcn taagtcagcc cagattccca acccacagaa 240
 actctgaggt aataaatgtt taaagccact aaaaaacc 278

<210> 666
 <211> 620
 <212> DNA
 <213> Homo sapiens

<400> 666
 gactccactg aatgcgctg actgcaagag tctatngagg gatgggnaat gtganccatg 60
 agggacacna gncactctgg atggcgngct tgcccggnntn cntgaacnc ttannggang 120
 gcnggntgtg gttcnanagg atgtgggctt tncccttac aaanggatag aagtgggagt 180
 ttgcctggnc ccccgaccca gcanggactt ttacaagggg acctngaattg cttggganaa 240
 actaatggcg aaaccttggg nctcactta agggctttt ttgnttgccc naaaccaaca 300
 cttgatctnc cttatttggg agccaaggga gaanganccc cggggggccc tgaattttt 360
 gcaanggtgg gcttaaacaa aaaacgtggg ncccaaaacc caacctgtg cccaaggcc 420
 tgggaaatgg ccaaatgggg cttcgaatct ttggggtaa attaaaaaac cctnttggtt 480
 tnttggggg tnaaaaaa aattttttt ntggccttta aaacccttt tggtttnaac 540
 aaaantttt atttgggcc anttttaan cccccaaaa aaaaaacctn gggnntttt 600
 ggggggaaaa aaaccttgg 620

<210> 667
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 667
 aagcagtgtc acgagcaaat cgcagaccag aagagacact tgtgggaaac atctagtac 60
 tcagtgttg cagagatagc aaggaggagg aatgatgggt caggcttctt ccagtccccc 120
 atcagaatcc atgggacaag caaaggattc cataaaggca gctgagagcc actgggggct 180
 tcctgttcaa aagctggaaa aagttaatca gaccagcca gaagacacta gtggccagca 240
 aaaacctcat cctggggggag cggttaaaga cagggttctt aagcaggagc cccgtctgta 300
 gctgtgagtc agcatcacca tgccaaaaac aaagtccacg agtgggcaa accccacaaa 360

aaccnngga cttggggtt tntggnant ttancccccc ggggaagggtt tt

412

<210> 668

<211> 257

<212> DNA

<213> Homo sapiens

<400> 668

cgtcgaactg agatcacaag accctgggtc cagagcgggtc ctgctttaca cccgagggga 60
aaaggggaatg gtcctncag aaagggccan aagaatctgg agangaaggc cnatcacctt 120
tgccccgtg ggtgnccatt ctttattgga cctaagcctt aaaaatagac caggtcccc 180
tgggtctttg ggtcttcatt ttgaagact cctgtcatgg taaaacctt ggattaaaat 240
aaatggtatc atgcatt 257

<210> 669

<211> 497

<212> DNA

<213> Homo sapiens

<400> 669

ttcgtccact gagtnantnc gcancaagaa cagcaggcaa aaggaaaggc accaagtgt 60
aaggaagaat atttgaagca gaacagaaaa taatttctga gcaaaaaggg ctatgtgatg 120
atgcttcatt cagctgggtga tccattacac ctgttaagag gccaaagaga actgtatgac 180
tctgaggtcc atggggggcag gggcaaggga ataagatgaa gggaacacta gaataaatga 240
agtgccttaa cagctgaaaa ggctgatgga tgtgctttgc acctcagaag acggaactcc 300
cagcaggaga ataaagagtg caacaagagc agagcctgct agaaccaca cagnaggga 360
actgatcctc taataacctc tntttcaga actttataat gngctattaa aaacccttg 420
tttnggggt anaaaaccng ggctttaccc cccttaaang ggggtttttg gcctttggcc 480
naaatccca attgggg 497

<210> 670

<211> 257

<212> DNA

<213> Homo sapiens

<400> 670

gaactgagag acgagaccta tgttaccag gctgtatgtg aattcctgga ctcaagcaat 60
cttccatct cagcctcgtc cctggaactc cctccaggt gcccaggac ctgagagaga 120
ggtggagtga agggggagag aaaacaaagc ccagggactc gccccaaaa aacacaatca 180
agaagatgct cccagctttt caatttcaga cactgagctc ctgcgaagat ttgttgga 240
ggaaagcttc tacagtt 257

<210> 671

<211> 254

<212> DNA

<213> Homo sapiens

<400> 671

agacnanncc tnnngctnnn nggtggcttc ggattccang agggcgccca anaacggatt 60
aactgncagc ttcttgagc acaagcttgn tattagcgcc tatatccttg gtcaagcaaa 120
agtggctctn caccaactta atggtctttt taccaccca ttttctggac gaacgtaatc 180
acaagtaaga accaagaagt gtgcaagtcc ccgaatcca agtgcttcat aaataaaaga 240
atcccagaag cttc 254

<210> 672

<211> 306

<212> DNA

<213> Homo sapiens

<400> 672

ctccacttc cagcctccct tgacctcag ttggagccat ttggtggag tatgaccaat 60
ggagtatata tagaggtgct gctggactgg gacacatgac cagatgcacc atctctttc 120
ccttctggtg gcaccacaga ggcccgcacc attaccagaa gcataaccat gaagggaagc 180
accagaaagc ctgaatcggt tgcttgaag ggagaaactn ccagggggcc caaaataacc 240
cagaaaaatc ttaccttga ttttgcttaa aataagaaag taaaatcttt tattggtgtt 300
aaatcc 306

<210> 673

<211> 125

<212> DNA

<213> Homo sapiens

<400> 673

gtagactgag atgatatga cacgaaagga aaattcctaa ccagtgcgca agaaagaaga 60
aatcaacca tgcataacac tgatttga taatatctta tccataaacc aacagagaaa 120
atgcc 125

<210> 674

<211> 288

<212> DNA

<213> Homo sapiens

<400> 674

agaactgaga caagagtaaa aaaatagtg tacacgagat ttggatatca aaaaggttct 60
gcagttaagc tgatcagtc cagcaagatg gaagatcaac ctcaccattc atgaaaagaa 120
aacaatggt ttaagtcacc accaccacca ccatgaagac aaagccaagg acagaaaagg 180
ggtgaccggc cttegtctag gagtttgta aaagagttaa aagtgtgtca tttgtttta 240
ttgcctattt tatttctccc cgactttaag aatgggtcct aagcttgc 288

<210> 675

<211> 343

<212> DNA

<213> Homo sapiens

<400> 675

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agtcnattg atgtgcagca aagcacacca nactccgtnc ttgntggna ttagnttgac 60
acncacccca naccaggtat tcnngcttca accnagggtc tggacattnc cacntangg 120
aaccaggaat aaacaagtaa ggaaaaaact tcaacttcga accctntaa tggacttccc 180
atttcccaa anttggccaa atcaagcact tncnennnt taccaaaggc ccccttnccc 240
cggacaagaa ttaatntta aaaaaacntc ttgatcccca aaatgttcg ggngaggaca 300
aangtttga agtaacaaat aaaaaattnc caggtctcct tgc 343
```

<210> 676

<211> 94

<212> DNA

<213> Homo sapiens

<400> 676

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tagtctgca ttagtagact gagtgccatt aaagatccaa agtcatgact gactccaagt 60
atttcacaac ccaataaaaa agggaaaata ttg 94
```

<210> 677

<211> 456

<212> DNA

<213> Homo sapiens

<400> 677

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gactctgggg agctcctgca ttaagtcaga gggngagatg aagaaactgg ggctctgaat 60
ggcatattaa cgcgtgcagc tccagacagc gaggaagtga tggcaactct atccgaactc 120
aaatctgcca gacctatacc agtaggtgcc tgtgtgcagt tggggactca cctctgcat 180
tgctggcatg agctagctgt cttgaactga aaacagacac tcaaagatgg gctgtgggat 240
cccagagagg tggcagaatg gtcaaagcta tgaagccaac agctgctgcc aagaagaaag 300
tcctgagccc tgagtattg taattaaaa aacttaatgc tgggagtggg tgttatttt 360
ggaggagtgg gctgctatt ttggnittg ggacttgctc attcatctt tctcacggcg 420
cctactgctg ccttggncgg aagttaaagc tcaatg 456
```

<210> 678

<211> 494

<212> DNA

<213> Homo sapiens

<400> 678

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agaactgagg aaaaacttga ccaaaggaag ccaccacac tgataattgc cagcctggga 60
gaaatgactg tagaaggcac atccaggccc cactcccaga cccagtgcc aggctccaag 120
catctctcca tactggaaca gcacggcagc tcaaactctg gaactcatalc cccgatctgt 180
aaccgtacc tcagacctac atcttcaact gatttcagcc caactgtgag gctaattctg 240
ctttcttct tiggatagag gcttaaaaa atataaaag aagatgatgg acacgaacgt 300
agattaatac tcttgaata ccttaagga gtaactactt taatagcttt aggtataaac 360
tactgaaac actgggatga attgggggtt atctgcttt taggtgaggg gaaaancccc 420
cnnccaaaat aaccncnct ggggttttaa ggttaanaat tttaaaant tntttnaaa 480
gggttggaag aggg 494
```

<210> 679
<211> 246
<212> DNA
<213> Homo sapiens

<400> 679
gcgactgagg ttacaaggt gactacgtg ttctagtcca tctgaagaa tacaaaatga 60
atcaaagagc atcgcttctg ccctcaagga gcttcctatg tggaaaggaa gatgtggtac 120
ataaaggatg tggatttctg ccttggtgtc ctgctggtga attctctcca gttataaaac 180
atttgttac ctccatcgc tcttaattaa aaagggaataa gaaactccta gggctctgac 240
aacagg 246

<210> 680
<211> 447
<212> DNA
<213> Homo sapiens

<400> 680
gcctgataag tacaactggt gctgctggga gacgcttaca ctatagtctg aacttctaca 60
gagccttttc ctactgtaaa cctcactcaa aaatgacagc ctccatttc acaagaatca 120
gagtcttctg atgtgcccc cgtggtatca actcenggcc tcaagtatc ttctgcctc 180
agcttaccaa agtgttgga ttacagatgt gagccacagt gccagctctg tgtgtgttt 240
tataattgga agcacatgac atcttttaca caatatgcaa atgcatattg aggaaggagg 300
gagagcaa atgtctaaaa gtaatcacia taagtctga cccattaact gtcagatcaa 360
aatccacacc aattttatg tcagaagaac actttgtctt ttttaaaac tnttntaaa 420
acacctccc ccgnttttt taaaaaa 447

<210> 681
<211> 299
<212> DNA
<213> Homo sapiens

<400> 681
agaactgagg acggtgggtg actggtccc ctggcccttc ctgctctca gcaagagctc 60
ctgccactgc cacagtggaa aaggcctgaa ttgggaaat gaagacgtca gagactcgca 120
acttctctg aaagcccagc caacttctc acaagcatga ctgcagacgt ggaagagaaa 180
aggcagatgg cctgggttca aagcccagct taaaaacaca tattctagct ttgtgacctt 240
ggtcatttg gtttacttc cctcatctgt aaaacgggga gaataaaggc ctctaact 299

<210> 682
<211> 500
<212> DNA
<213> Homo sapiens

<400> 682
gctcccaat gaactntatn ctcttcattg gacntgtatg ggattatnga naggaacttg 60
cntacagagc ggnccactag agctcagcca gatcactcta cagtgaagct ctcaggaaac 120

aagtaccatc tacaaggtgc ctaaggaagc acagaggaga gccacctcca aaatggatac 180
 cctctccaan ggttttagt gaaagaggca cagctcttgg cctggagtgt gtgggggctg 240
 cgataagtgc aagatacttg gtgacaggaa tcgcgagcat actcttgtgt tgtacggatt 300
 ctcagggtcg gccctgcaga ggaaagaact cngtcaccgc gaggtcctgc caacatgcc 360
 aaagtncccg gatatgtgtg cngggngtta aacctaaanc ccccccccc ttttaatttt 420
 ccnaaaaccc ccaaaaaagg ntgggggcc cttctttta ccccttaaa nggggggggg 480
 angntgnttt tttgaataat 500

<210> 683

<211> 360

<212> DNA

<213> Homo sapiens

<400> 683

ggaggaggtg aacgcattgt ttggcattac atctgggctt ccagccctca tcaaggggaa 60
 ggggctctg actcctgcc gaaagggac ttagttgctt tcaagtggga tttattcac 120
 ctggacagtc atgcaaccaa atcacaagca gagaggagc tcccccaacc cagagtcacc 180
 acacgtgacc cttaatataa tgtgtattga tgacaacctg aagcagcctt gacttcagtc 240
 ctcagganaa caatatgcaa ctctttataa caactggagt tcccagatt tccaaagttc 300
 aatgaagtg aaagacaatt tctggtgagc atagacatta aaaatgagaa acaaatttc 360

<210> 684

<211> 469

<212> DNA

<213> Homo sapiens

<400> 684

ggatgaggtg ggaagagcgg tggattctac tcctctttca tcatttgacc ttcaacaagt 60
 caacctccac tctctgggcc aactcagcaa accaagccc aggacccgac cacctccaag 120
 atccactca gtcacaagt gtcacagtc tatttcca agagccttc tccagcatgg 180
 actgattctc caggeccctt tgtgtgtata ctcccacaa agggacactc acaaattgca 240
 ctccaacaag aatgagatta tcctctaaag tactgcgtta aagtgaggat caggagagaa 300
 tgaataact ctgagagaca ctctctcta tacagaagca agcaagaaac tgggaaagg 360
 aaagtcctc cgaacagaag gggctggaga aaactcataa cacattagcc ttactctta 420
 aagcttcag ncaccaaaga aatgcttgat tccgaaatcg gttttgtt 469

<210> 685

<211> 310

<212> DNA

<213> Homo sapiens

<400> 685

taactgatgg tgangtntnt nctaccagtt tacttaange tgtatgtac gtgcttgaac 60
 cctaaaagct gggaaatgag ccaaggccac ggtgtcagc tgaggagcag gtgtccctga 120
 gaacccaaac atcctagagt gtatctggga acataccaag gaaaagagtc tcatcacatg 180
 cggcagccaa agagccacaa aatcagctta aaagcagctt anaggcgtgt ggtgggtgga 240
 tctctagagt tctcctgatg ctgcccgaag atgtcctgtt tgtgaatcct aataaactca 300

<210> 686

<211> 97

<212> DNA

<213> Homo sapiens

<400> 686

caccagaact gcagatggat ttccgacgga tgaatcacct tcagcaaccc cagcaagttc 60
 tcattaaatg ttaccctaa agtaagattt tatgatc 97

<210> 687

<211> 344

<212> DNA

<213> Homo sapiens

<400> 687

agcaatctcc catctttaac agatgaagct taacacaaga gcagcacaaa aaccgtgaaa 60
 aagaaggtgg taaaaaatcc atcttctcag actaccttgc tgatgaaaaa aatagctctg 120
 tgacacagtt caagccgatg aggtatgagc agaanagttc tctgactgtc tggaaagnct 180
 gatttctga tacagacacc actcttttcc ccatgcctga attctanatg tgttgataga 240
 tactggggca gccatccagg gaccatgagg ggnagaccaa gagaattcca gaaaggntga 300
 cttgttgta actcaacct ctgaaccact tgctactct taac 344

<210> 688

<211> 193

<212> DNA

<213> Homo sapiens

<400> 688

tcgattcaaa tgttcttcac agttgtcaca cccacaggat cacaaactca actgaatctc 60
 ctttaggtca agtttctgtg gaagaaactc agaaaatggg acctggagaa atactcttct 120
 catctaaatt gtcaaaacac ctatggatcat ttctcagtaa ctgataatcc aaaagtaaaa 180
 tattaaagtc cag 193

<210> 689

<211> 306

<212> DNA

<213> Homo sapiens

<400> 689

acagtctgc atagtcctnc tnagcctaata aatcctgggtg accaactata cccagcaggg 60
 aggacaaagc tcttaacacg aaagagtggg gagaatctct ccattaccct ttacatatt 120
 cagggaagag agaatatcgc agtcgctgga aacgaagggc acagcatcgt gttgctgtat 180
 ggccacggtt ggccacagaa aggcagaaag tcatcaactg tatggaaacc agacaactct 240
 gacgatttct atgcaaggtg actacacctt actcgttctc caagtattaa agatcttttc 300
 atcctt 306

<210> 690
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 690

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attacagatg ttctgcaaga caggctgaga aacagaatca ttcaatcac tctgctgta    60
tctgagggg agactctccg cctgttcaac acagggacac gctgcctccc gtggcaaggt   120
gactgtcttg ctgctgactc gggcaaaaag accatgagaa tgaattcacc aaccagggtt   180
ccctccnc gtaaatactg tgagaaaatg gatgtcagtc tccagctgac cgcagagaaa   240
tcacggccag gtgttggcac ttacagagaa gaatgaatac agaactgctt taatcataca   300
ctcaggaaac tcccaattg tatcaatgac tctatataag gaaacgaggn ttgggacctc   360
caacnaact cnttgggngg cccaagcaa acaattcac ccaacggng gccctatgga   420
caaganaaac tctgcagtt attctatctt ctnagctccc tgctcctcgt tttctcacc   480
ttagcaaga                                     489
```

<210> 691
 <211> 244
 <212> DNA
 <213> Homo sapiens

<400> 691

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ccctcttcca actggaggct tctctgtgg ctgggaacat ttctgcctg gctgcgagga    60
gtgagactaa gaaaccatac ctcaggctga ggagagaggc cgggtttgat atgtgtgccc   120
tggggaagaa aaggagaaaa tgtgatactc tctcatttaa agcatccaca tcaaaaattg   180
aagaactgga ttacattgct gtttacttag tcaagttaca ataaacttga tttcctttg   240
ggtc                                     244
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<210> 692
 <211> 237
 <212> DNA
 <213> Homo sapiens

<400> 692

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agaactgagt taagaaaata cctgggagga ggagccaaga tggccgaata ggaacagctc    60
cggcttacag ctcccagcag atgggtatca ctatcttgcc cagcctggcc ttaactctg   120
gaattcaagt gattctctg tctcagcctc ccaagtagtt gggactgcag gttgcacaag   180
tacacctggc tctgatttat tattgaagac tccaaataaa gaacttgcag aaactct    237
```

<210> 693
 <211> 147
 <212> DNA
 <213> Homo sapiens

<400> 693

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gtatccctga ccattcagga aagagacatc aatgaccgca acaatacaa ggaacacaag    60
attctcatga atcaaatgat acttggaatg aatacaccia taagaattta ttgcaaaaa   120
```

<210> 694
 <211> 169
 <212> DNA
 <213> Homo sapiens

<400> 694

cgacagagtt gaaaccagat gggatcac acaattaca acccagagt ttcctgtta 60
 cttaaggac aaaggaagag gacattgaa aagacagtag ttnagaagc ccttgaaaat 120
 acctccatca agaagctctg gatctgcaag ggggtggggc tttgcatt 169

<210> 695
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 695

cgataatag ctgtatgagc ctctgtct gctgccatt acctgcgtca cctccacaag 60
 ctactgaacc tcaaggaacc catctcctca tcaggaaaa aaataagctt tatcagggtc 120
 tgaactctgt aggtcttcac cacggctcag gaggatgagg agcagtgaca ggccaaacta 180
 cgagaaaaga cagaggggaat caaactcaac actgtgtcta aacctctcc accactgttg 240
 aggggatcct ggcatcagat ggggaacagc tctaatcaa aataacctca ctactgtgt 300
 ttctgtaaa accaggtaaa gatcaacaa gcatgagttg aaaggntaaa aaaaaaaaaa 360
 aagggccggg gnggccattt angtgggat tnaacnngt naaantntt aaaaaggggg 420
 ggcccccc 429

<210> 696
 <211> 185
 <212> DNA
 <213> Homo sapiens

<400> 696

gctgaaacat gactatgatg gtgacctagc ttggccatg caggagatga cagtggcaag 60
 agaaggaaaa tctgggttc agatcgacat catggagcag agctgcgcca acaacctgaa 120
 atgcatgctc acagtggcct gtaagaggg acagaaatat aaacattaat gaatgaaacc 180
 actat 185

<210> 697
 <211> 292
 <212> DNA
 <213> Homo sapiens

<400> 697

tgaagaaat gaacagacaa agattaaaag actgcagggt tgaaggaagc tcatggaaaa 60
 atgtgcagag atgcataaag gaaggagaaa agtgcagcaa agccacatag aaaaatggcc 120
 agaagggtca ctcttagcca ccaccacaca gagaaatgaa ctaaaatgaa aactcacaac 180

tcaggaatat ggaataataa gcaatcagaa acataaatat aagcagtttt atctattcat 240
tatttttatt ctactattag aataaattca tgactaaata aaattattca gc 292

<210> 698
<211> 472
<212> DNA
<213> Homo sapiens

<400> 698

gtcctgcatt ggccaactga ggattcttcc aaacaagagg ccctagtctg tgactgtcaa 60
gccttgccat caacactcct ctttggtgga gagctccctg ttggccctga ggcaggagtc 120
ttctgagatc ttgacatag ctgggcttga tccaggcctc agtacagggtg aggaaacgga 180
ggcctgtaga agtgaagtga cttgctaagg ggcagggctg aggtctgagg cctggtctga 240
gtccaaaacc cgggcagggt ctgagagctc caccctgctg ccattctacg tccaggcagg 300
gcctgcaagg gacagcaatg atgcaaagac aaacaagga agagcaacc cagccctgcc 360
acaaaaccag ctgggaccnc cggccaaaag gagttattcg acctntccag cctcagttnt 420
tcactgtnt atgaaaccaa cangagtaaa tatagaatgg gagtgaaac gc 472

<210> 699
<211> 203
<212> DNA
<213> Homo sapiens

<400> 699

agaactgaga tctgaacttt aatactcttc atgcttacag accccggctg gcctctgtcc 60
ctcaccattc tgtgtctaga aaaagcagtt gagaacccat attcttcaag aacccttccc 120
cattacaaa caccatatta ttatatTTaa tctacccttc agttcttttg tagccaaatt 180
aaaatgtatt actctgaaga aag 203

<210> 700
<211> 372
<212> DNA
<213> Homo sapiens

<400> 700

atgcgggaga gaatatTTga ccttagattt gtccgcctgc atctttctcc tgacgccaac 60
ctcagttcct cctctgactg cctctctcca tctgtattgc aaaacaccaa actctctgcc 120
aaagaacaca tccagggtgtg gccatgtgac tgagctctac tcagtgaagaa ctgttgtggc 180
acgttctgga cgatgcctca gtgaggcgat gcgcattctt tgccttccct ttgtctctg 240
ggaagtgatt ttgaggatag aaggtatgcg ctgaggatga tgggacagaa tcatgaagcc 300
tccatccaag acttcgctcc ttcttatgga ttcttttat gngggaaaat aaataattgg 360
gggggggtgga aa 372

<210> 701
<211> 396
<212> DNA
<213> Homo sapiens

<400> 701

gactctggcg agctcctgca ttacctcnca tctgtgactc tgaggggaga aagggaatga 60
catccaggac aagaacaaag aatagaagag gaaaggtgct gctacaagtt ggaaagaagc 120
agacagaggt cctgtctgat tctccaaata tgtgtctaata ctgtttactg agttccatag 180
cacttgagc catccatgcn aaaatctgta gaagagcatt ccaggaagag ggaagagcaa 240
atgcaaagac gggcgtgaga gcttgggtgca tacagccatg ggccaaataa agtttccttg 300
gaatagcaaa aaaaaaaaaa aanggcgggg ggggnnnngnc catttnggtt tnancnnnnc 360
cnnnnntttt ttnagggggg gggggccccc ccccc 396

<210> 702

<211> 495

<212> DNA

<213> Homo sapiens

<400> 702

gtggtgttcc cactgntgaa gagcangcga cnggnaagga ccatnaanca actnaccagc 60
taggagtgat gtactatgat gggctgggga ccactctaga cgctgagaaa ggggtggact 120
atatgaagaa aattcttgat tctccatgct ccaaagcaag acacttaaaa ttgcagctg 180
cttacaacct cggaagagct tattatgaag gaaaaggngt taaacnatca aatgaggaag 240
ctgaaagact gtggcttacc gcagcanaca atggaaatcc caaagctagt gtgaaggctc 300
aaagtatgct cgggctgtat tactcaacca aggagcccaa aggggtaaaa aaaggcnttt 360
tactgggcnt tccgaagcat gtggcaatgg aaatctggag tcccaggggtg cacttgggct 420
catgtacttg tatggacaag gcatccggca ngatacggaa gctgccctgc agtgcttaag 480
agaagcagca gaacg 495

<210> 703

<211> 369

<212> DNA

<213> Homo sapiens

<400> 703

aactgaggaa ccttgggtg cccagctgct gtccattctc tacacttacc ccacctgatg 60
gaaggctggt aagaaaaaca tcaactgcaat gcctaataaa cagacatggg tcccagaccc 120
aataagagtg aaaccatccc cctatttaaa tgaaattatg gctgatgaga aagacaaatt 180
aatttctctg tccctagtat tacacaaaac ttggatgct gccattgtta caattttatt 240
tccccagga gctcagagtc ccaccttcat tcttttgtt taatgcttaa gcttgccctgt 300
ccacctatgg aagactagaa tgagcaaaga ccatgtattc aatgatctgt aaatctaaca 360
ggaacaat 369

<210> 704

<211> 153

<212> DNA

<213> Homo sapiens

<400> 704

gtgtgatgga tggagcattg gagcaaccac aagggaataa aatacagaca tgaagaaaac 60
agtaaagatg ctgtccctga catcattgag cagtcagcaa ctgcccacta ccaaacttat 120

tgtcatgtga aaaataaaaa cctccaattc ttt

153

<210> 705

<211> 131

<212> DNA

<213> Homo sapiens

<400> 705

atccaggagg taancaatca actaagagcc aggcaccttt ttaagtcag taagaagaaa 60
catttttaca acctgtgtc tctgaagtct gctatctgag attcctctcc acaataaaac 120
ttggtctcca c 131

<210> 706

<211> 323

<212> DNA

<213> Homo sapiens

<400> 706

atcatccaca aactacaagt aacatgtagt tacaacatgg ggctcagaat gtaccaagat 60
catcctatgt ctacagaaaag gagtaaaaca caaagactaa acagagttac ctattcttg 120
ttagcctgag aaaaattctt ttcagatgtc ttccattacc tcagaaatgg aggcaaagtc 180
ttaaagaagg gtcatataat actttgaaag gctattgcca tgggtgtggtt attaagctct 240
tgggaaatga tgggcttctc ttcaagtata aggaacaatt gtgcccccta agagtcacat 300
tgaattggaa tgaaataaac tgg 323

<210> 707

<211> 273

<212> DNA

<213> Homo sapiens

<400> 707

gacctgcatt aaggtcgact gagtttaaga ttccccagat gccttggata atttgtttg 60
gaaaacatat attgaagata ccnagagcca cagtatgaca gaagactagg tcccagaatc 120
acaactggaa ggaaagtcat gactaatga agaaaacaat tcttaaggct tatatgagct 180
gaaaacaaac ttctgtcatg ttgctgcctt tatccattt taaaagatgt ttgtcatcag 240
tgggtctact ctaataaaat acatcatgag cac 273

<210> 708

<211> 390

<212> DNA

<213> Homo sapiens

<400> 708

gcctgacaaa ataagtggct gtgctcggaa agcccaagtg acaatgaagt ccaggttaacc 60
tctaggaatt gcaggttccc tcttgagct gaggacagtc tccagtctcc agccagcaag 120
aagccagggc cctcggctct actgctgcaa ggaaaggaat ttgcctgtg cccggagtca 180
gagtggaagc cagttcttct ccagtgaatg tgaacgcagc ctggccagct ccttgatggc 240

aggcgtgaga ccctaagtgg gggactgagt gtacctggac acctgatcca taaaaactgt 300
gagaaaaatc tgtcttgnnt taaagnncn tcnttgggg gcaatttgca gcattaaata 360
attaagtaca agtacatgtc acccaaggtc 390

<210> 709
<211> 430
<212> DNA
<213> Homo sapiens

<400> 709

aagtctcaac aattaaaga aaattagaag ccaagtgcag tggctcacac ctgtaattcc 60
agaactttgg gagccaagg tctgcatac cactgaaact actgatgtca gctttctgaa 120
ggacccact gagaagactc actaaagaaa gcagtttcca tgtctgatg atttgtctc 180
ccttaccctg accaatcaat ggccctaatt ttgggtcatt ccattttctt gccctccatg 240
atacccttaa agaccctgcc cagacctcgt tggggaaatg gatttgaggg tctccccca 300
cctctttgct gggaagctta tgatcattaa actatttctc tgntgcnnnn nnnnnnnnnn 360
nnnnnnaaaa ggggcggggg ggccantnn gttnnnntn aancggngn nttttttaa 420
aagggggggg 430

<210> 710
<211> 473
<212> DNA
<213> Homo sapiens

<400> 710

gccataaggt tcttaagagc agagaatatt gtttctgtaa tgattctcg caaaagcact 60
cagttacagg attcatacca catgatagat tctaaatctt gggaacagaa tcaagaatcc 120
agaaatggat ggaaccacac gtatatgaac aactgattt caacaaagat aaaaaggaaa 180
agctcaccta tgaaagagt ctctctcca gccagacaat aggagtaggg aagagaccga 240
tgctgaatga ctcacgaaaa tactgcagga aatgcagga cgtccccag aagtccttc 300
cactggcttt tgccgggctg nttcattaa anctggcagn aaggatgaat cncaagaaaa 360
aggttattg taacctcaca tcataaatt tataaaactg cttcataaaa aataaccttg 420
gggtccagga actccactag aaaaatgtnc aacctgtctt caaattgggg aac 473

<210> 711
<211> 464
<212> DNA
<213> Homo sapiens

<400> 711

ttcttgaat agcacctgat acacaaaagg catccagcca atgtttgctg aacaaagaaa 60
tgaaggctgc ctgcatttac taggagaagg atgacaacca catgggacaa aaaaagaagt 120
tttttggtg nancnagnc cgggggggtc gnantngggg ggtntnggc ntannnnnt 180
taaaaaatga ancccgaggac ntcccggnna ctgcntgng cagggnaaaa aacagtentt 240
ccggancenc ccancnggg gttggaacg tgcctcgta cattccaact agatggggtt 300
tctcttgtt gtccaggctg gagngcaatg atttgaatg tggnnncctt taactcttga 360
gctcaagcaa tctcctgcc tcagcctcct gagtattntg anagtatagg tgtgtgccac 420

cacatccggc tccactttt gtttgaag attccctca acat

464

<210> 712

<211> 316

<212> DNA

<213> Homo sapiens

<400> 712

atgagcataa atgagagtta atgcatctaa aactgaacac aaacacctgg gggaggaact 60
gtgaaggacc ctaacaccac caccaccctc accaccctg ttgtcccgca tatccacagc 120
caccatggtt gccttggcca gcagaagccc aaaactgagg gcccttgtga aaccagctgt 180
tggaatatat aataaaggag aagttcattg gatgctaact caaacaggac caatgaaata 240
gcaacatgtt ttactatcg ggtacgtgtc ttgtagact cacggtaaat gttaataaa 300
tatttgatga aagaat 316

<210> 713

<211> 513

<212> DNA

<213> Homo sapiens

<400> 713

agactctggg gagctcctgc attaatcat gaactgagaa atgaagactg gagaagcaat 60
gggacacaca ggcaatgggg ctaggcattg gttgtccca ttattcatg cagcaaatgg 120
ccattgcgtc ccttctctgt gctaaacctg tgcaggtgct gccggacttc ctggacataa 180
gacctgtcc gggcactcac caccatcatg cttgaggccc tgccttgggt tcagtcttcc 240
cacgatctg actggcagtg tgtcgggaca gtccccaggc aggcctcccg gatacctgtc 300
tagattatct ctgtgtgga ttagccttt gcccagcat tcaccagtga caagaaaaaa 360
aagnactttt antnttcca aggctntacc tgggtggtgg nggatgctgc tgcactaga 420
aggctactgt aaataaagcc tgcttaatct ccttaaccgg gatggcttgt gtcaaccggg 480
ttggagccgc caggaaacag cccatgctt aaa 513

<210> 714

<211> 323

<212> DNA

<213> Homo sapiens

<400> 714

agacgtctgg ggagcacctg cattaatgtc gaanctgagc atcctnca actngatct 60
gtgatttggg cacggcttgg tggaggcagc tcatttctgc ttacgtggc atcagctgag 120
gtggcttggc cagaggttgc agaactcgcg tccaggacag ctcactcatg tggctggcaa 180
gttgatgcgg tctgtcagct gggagctcag cagggtattt ggctgggggt cttggttctc 240
ctccacatgg gctttccac gggttgctt tgcttctca tggcatggtg gctaagtccc 300
aacagtaaac gtcccaaaag aac 323

<210> 715

<211> 320

<212> DNA

<213> Homo sapiens

<400> 715

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gaagtcaact gccatttttc gtgagctgtn aagctgacct atggaagagg gtcccacatg    60
ggcagggaac tggatgtctt ttgcnacag ccnagaaang gatggatcct tttactacc    120
ccaagaaatg gagttgggag cagaatcttc cccaagctga gcctttcaga tgagaccaca    180
gacctgcct ggcaccttgg attggcagcc ttctgagaa gaccttaaa gccagaagac    240
atccaactac acccattgcc tcaagttgct tgaccccaca agatacccat gaagataata    300
aatgttgtct taagctactg                                320
```

<210> 716

<211> 251

<212> DNA

<213> Homo sapiens

<400> 716

```
gctcactttc aaaaccgggg gnggtcagcc catttggta ctggatgaag caggatgcag    60
gctgaatgga gaggtgggtgg agttcgagc ctgtcccagg cactccctca ccagctatc    120
tgccaataca ccactttgat ttatctattg taaagctttt taaaagtgtc ccttaaagta    180
gcttaaggac aaatgtgaat aaagcttcac agcaagtggg gatgcagcct gaagaggcac    240
gtcataagct c                                251
```

<210> 717

<211> 93

<212> DNA

<213> Homo sapiens

<400> 717

```
atctcccata aattcccaac atcaactatt taaccgtatc atctcatggt taaaaaaaga    60
aaaaagaaga agatgatgat gaaagaaaag aag                                93
```

<210> 718

<211> 470

<212> DNA

<213> Homo sapiens

<400> 718

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tagtgtcata agaacggact cggttcttcc tgcgtgacca cggatgcttc tgttgagaa    60
nangcatccc acggtgggac gtttanatca agaaagctnn tgannaagac atttgtnaaa    120
gggcaacctt ggggtangtg gggaaattat ttctttttna tcaaccctt ctgcaataca    180
agctggaacc tggcnccata ggaagtctcg ggacaattac gggaccatcc ttttcttt    240
tctcttctt tttttttt ttggtnggat tggtttgga nacaaaagtc tttgtttnc    300
ccaaggctgg gagtgcagnt ggcgcaaadc cccgggntta ctgnaaacct nccgccttcc    360
ttggtttaa ggggaatttt tcttgctta aancctnct gaagataact tgggaanttt    420
nanagggng gngggaaaan ccaaaaaaac cnngggnaaa atttttttg    470
```

<210> 719

<211> 417
<212> DNA
<213> Homo sapiens

<400> 719

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gggagtaaac aacaccctcc cagaagatga tacaggccaa atcccgcaac gagagggtg 60
ggtcggaaca cacacaggcg cacctnccan agggccccga cacttcattt aaggnaagaa 120
cggagcatcc cacgaacggg aacaagnttg ggaacctggg atttggttc ggtgacaccc 180
taagcaaccg ggggtgaagaa cgcttaagct ggggaatccc gctggccttc tgntcatcaa 240
agcctgtctt ttaccggcc aacctncca acccctaagc aacccccgc tcccaggaa 300
aaataaagtg ccaccacgt cgttcaata gcaccggccc aaaaaactcc cacttagtt 360
cctggaaaaa ttaagtcccc ggcanggggg cctttttt ttttaaagg gttttc 417
```

<210> 720
<211> 161
<212> DNA
<213> Homo sapiens

<400> 720

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gtcttggac ttagtctaga actatactac tggtctcct ggggtctcca gcttgcctac 60
tgcagataac gggacttctc anactccatt agtgcattg acaattcctt aaaataaatc 120
tgngtgnatg ttattgnatc aataaaatat atatgtatcc t 161
```

<210> 721
<211> 485
<212> DNA
<213> Homo sapiens

<400> 721

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gaggcaggtc tagaggcctg ggagacatgc tggacaattc cgaaaccaat tctggttaca 60
gaaggcgaca tgttttcat gtgggccatt caatgagaat gtggggggacc cctggcagag 120
atcaggaggc ccaaagagg agatgacaga gcagagccca agagaagcat ccagaggaaa 180
cgttcggat gactcctccc ttctccggcc agccactct gaaggagggt agcgaggggg 240
cacagggtga gggctgacct gcctgtgagc cccggccctg ctactactg gctaccgtta 300
cctggacaga tcaccacttc gctgagcctg agtctcatt tggaaaacag gggaaaaaat 360
actatttt taaaaanaca tggntnggc attaaatna attntgcca nattctntan 420
ctntgtgaaa gtcagcntat ggaaggcnct ggagagnnta acaataaaaa aataccttgg 480
ccttt 485
```

<210> 722
<211> 290
<212> DNA
<213> Homo sapiens

<400> 722

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ngatgcctcc aagtggttg aaggaaagta tcngancatn tacnaggga aagggccaca 60
ttgtgggca ttncaggcca caanccctna agcttgaggg tcaagaagct nacaagccag 120
```

catttaacca ctaacccac caaggtggaa aggggaagac ttcgaaagc cttcaaaact 180
 tgcccaagc ttaaatggcc aaggtgggga agcagaagat gaagttgtcc ctgtcttgaa 240
 aatttgaag actcatgaag ccaaaaataa aatgtaagt tgtttaagg 290

<210> 723
 <211> 629
 <212> DNA
 <213> Homo sapiens

<400> 723

tttctgcnct cctccaccc tcgngctct gccgnctnca cccctnctt nattaaagcc 60
 ctgnctggn tggnncaagg ncaggtgggc acccttnac cccgagaaag aatnttnaa 120
 tgggcaagg ggnattttt nccaccccc ctngaccna ggaaacccn aaaatgggcc 180
 ccaaaaacca gcaaccnagc cttacaggg agactttca agaggaggag gaatttggc 240
 ccaaaaataa aaccacttgg tggggaggta tttgggatc cccgaagaca aaagaaaacc 300
 cttgcacaa agatccctca cttgcaaag gacaccattt cgctaaagcc catcgggagg 360
 gggcaagtcc cagggcccg gaaaaagca aatttggac ctttctctt gggccggaaa 420
 caccaaaaag ccaaaagttc ccnggggaaa aaagnaangt ttaaggngn taaaagagg 480
 cattttnt tnggacttn ccacggangg ggaaaaatac tttccaaag ccaaattnc 540
 cggggcccg gcaccaagga attttttt gntanggggt cttcaaggg gaagcctnt 600
 ggggccaga aanccaaaa aggttggc 629

<210> 724
 <211> 149
 <212> DNA
 <213> Homo sapiens

<400> 724

agaactgagg ttgtactggt cagtggacca tngtggaccg ctgggatntt gggcaggggt 60
 gccttgggat gangggcggg tgggacctt tatatnatgg ggaaagcact ctcacttatt 120
 aaagatcttg gnaaatattt aaaaaattg 149

<210> 725
 <211> 113
 <212> DNA
 <213> Homo sapiens

<400> 725

tgttctacc tggctcaagg aacctgctt ctctaaagg ggagcgtgc acccgatt 60
 tggctttta cggtggcct cagctcactg tcagaataat cttctaaaa cac 113

<210> 726
 <211> 366
 <212> DNA
 <213> Homo sapiens

<400> 726

cccagaccgg tgggaacccc cntagtctg cttattingg cntgaggaga ggtaggctnn 60
 cgancctnnc nnnaaaaaat gggtttttc tnacattggg aaantctgac nccttctnag 120
 aaaataaagt ggcttgtgtt gnccaaaccc cttaaccca agggaaaaag tccncgaagg 180
 ancctctttg ngnactccta aagccttatt ggaccagggt acctncttc nccccaaggg 240
 agaanccttg tcttgtcca ataagtggaa gacaagggtg gaagaaattt tttggcgcc 300
 ctacnctttt tttccattt tcaaaaaag aaggctgggc catttgntta ccttctgt 360
 ggatcg 366

<210> 727
 <211> 167
 <212> DNA
 <213> Homo sapiens

<400> 727
 gagagtagg cttgngaggc ttgctaactt tgaagaatg agacgaagt cctcccaaa 60
 attactact cccactctg gaagatgct acaagccac cagtctcaag aactatattc 120
 atcaccttt ggatgggtt tttttttaa ataaaaact aaaaacc 167

<210> 728
 <211> 213
 <212> DNA
 <213> Homo sapiens

<400> 728
 gattcttaa gcgcaaaaag cccaatcat tctttgaga acaaggacgc agatcttaca 60
 tcacgaacac tnnnactnn ttcattgggtg cagtaagaag atggaatcat gaaccaggaa 120
 gtgggtcttc aacagaccca cctctgccca caccttgatc ttggacttcc taagctcca 180
 ttaacncnga gaaataagcg tgtttttaa acc 213

<210> 729
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 729
 aactgagaca tctgacnnc aagcttgcc cttattaca gagctngaag gncaccgga 60
 aaaggagtcc agtaaaagg nngagcagct tcagggccca tggctacccc catgcaaagg 120
 aggtgaggcc acagaaccga actggggtct gtgcgctgg cacagcaaaa gtcaaacact 180
 aacattagga tggcagcgag aggaagtga gcaattatt gcaagcacca agcaaacaga 240
 gtggacagt tgatgcctaa gatccacct gcccggtggc ttgcagaatt tcaggatagt 300
 ccagggatca ccgaaagaga tcaccaaact ttcttatga agaaccat actaccaacc 360
 ttcgntttt gccggcncg nggctttga acttaactgg ntaactttc attaacngga 420
 aagtagcnc ggnccatat ccaaaaaaa t 451

<210> 730
 <211> 542
 <212> DNA

<213> Homo sapiens

<400> 730

ggacctgtgc ccnattctg aggtttttg gtgntcagng gngngggcta tcgcctttaa 60
aataacctgg gcctgggcag caacatggng nantgaaaaa aaagcaggct ttggaatgga 120
taaaactata ctgaatctc tgctctatca ccttatcatg ttatggcaag ccagntacgg 180
aacctccatc attgncagt gcctaactca gcttctcgcc tgctggncan gctctggaaa 240
gctgagtga aacagaaaag agccagaaaag ngctgtgggg acaactgca ataagtgtca 300
catgggcctn ctctctttt tatgtgcccc atgtccance ttttccttg gtggccnctt 360
tccanaaaac ttttgaaac cattggggcca aagttacctg gaaattttcc ctgggcctt 420
tnaaccttt gaccatttg gtaaaaggta ngaanatgga tnaaaagcct ttaagggnc 480
caaagggcag gngggggcct caanccctt gggcttgggg gtaaatgggg aaatcaatt 540
tg 542

<210> 731

<211> 267

<212> DNA

<213> Homo sapiens

<400> 731

tnacttcag aaaagagtga ccatttgga ttgtccaacc attaagatgt gaagactgtt 60
ttggagtcc tggtagctc aatgttgctt ccctgtcctc ttgcttcaa tgcttgagc 120
cacaacagcc atatgcaaac atgagtgaac ggccaaaaat taatcataga gacatctgtc 180
ctgataccac cagccagtg aatcaatacc agcaacactg caactctgct tattatgaag 240
gaaaaataaa gctctgtttt ataaagc 267

<210> 732

<211> 755

<212> DNA

<213> Homo sapiens

<400> 732

gggaaaaaac ctgggaagg gccctttccg gcccgggggg ttttgggaa ggggggnaac 60
caaaaaaac ctttctttt tttttnggc cngggggggg ccctttttt ttttccaa 120
ggntnggggg ggggggggaa aatnccggc naaccccng gggntaaant tcnccgaaa 180
aattaaaaaa nancccttt ttttttgtt aaattgnaa aaagaccccc cgggncccc 240
aacccccca aantggngg ggggnaaata ccnggggggc ccccaantt tttgggna 300
aacccaaaaa agggnaaatt ggggggaaaa ttttngggc gaaccgggc caaaaggggg 360
ttntcttt tncagggg ccaccggcc ttttggngg ggttgggggg anagnaaagg 420
gggccttaat tttcccg gcttanttg gaaacttgg gggnaacaaa ccaaanaaca 480
aaatnccggc nttgcttctt tgatggcncc gncctgttt ccgggcttgt canncgcaag 540
ggccgcccc gctcttttn ttaaaannga cctgtccgt gctgaatga actgcaggac 600
gaggcagcgc ggtatnntgn tngccacag cgtctgccac tgtctgacg tgtactgaca 660
ggaagggtg gctnttttg tnaaagcggg caggctctgc atntaacttg tttcgnaa 720
gatcatatgg tgangaanac ggggttgat acctt 755

<210> 733

<211> 367
<212> DNA
<213> Homo sapiens

<400> 733

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gggagtaaac accctccaaa gatgatcanc caaatccgca gcgagaggnt ggggtcggaa   60
cacacacagg cgcacctccc agaggccccc gacactncat naaggnaaga tcgnagcatc   120
ccacgacggg aacaagnttg ggaacttggc atttgctcg ctgcacctag cagccgggtg   180
aagacgctta nctggggatc cgtgtctctg tcatcaagcc tgctttacc gccacctcca   240
accctagca accccgctc ccaggaaaaa taaagtgcccccacgtcgc tnaatagcac   300
cgccccaaaa ctccacttta ntctgaaaaa attaagcacc gaaggagcct tttctttt   360
gaagggt                                     367
```

<210> 734
<211> 484
<212> DNA
<213> Homo sapiens

<400> 734

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ctcccgatgg acccgagatt cagggatctt tcccgggtaa acggtggggg cnggcngaaa   60
gaaatgcnat agagctaatt taagntctag atcatgatag cctgggatat gggatgaac   120
tgntattggt cgggatttcc tggaccatca tatggnaatg acagnttgnt atgtaatgga   180
gatgactgcc cagacctatg taaaaattta agtttctact aaaaatattc tcttgaagc   240
ttatgagact atttcaagg aaataacttc ctaaagaaat agggcccttg tgaaacacca   300
gggaataaag gaaataaatt gagaaaaatc cncaggett attttattg ntnccttnc   360
ccgggggttn aaaggaattt ttaattaaaa nggttcacan aaaagccctt ttcattatt   420
ttaaagatt ggacatattt tgnctttta cttatagcta gagcacncat actgggaaag   480
gtta                                     484
```

<210> 735
<211> 192
<212> DNA
<213> Homo sapiens

<400> 735

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cgacctgcat taagtagcac tgagagctga gatccaccct gcattcagtc tgaagtgaca   60
gaagcaagag actctgtctn caagaaaaaa gaaagaaaag gggattttaa gtcctagtc   120
tctggccctt tcttccatct catatttgg gnggcttctg tcacataata aatatgnatt   180
cattttctcc tg                                     192
```

<210> 736
<211> 271
<212> DNA
<213> Homo sapiens

<400> 736

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atcccagaag ccttgaaaac aaagagccca caattgcagt aaaaagcagc agcccggcag   60
```

ccaccagaga gggcagagtc cgcacaccc caccacttt gaaggagctg gagctcctc 120
aaagcctcat tcaaaagaaa ttgtcattat ttacctatc tgggtgttcc cgggaaccct 180
acttgcaagg ctggctttat gtgattaaag ttcacagtg taaaaaaccc ttttcctag 240
tatgtttgtc aaaaacaatt aaaggttaatt g 271

<210> 737
<211> 210
<212> DNA
<213> Homo sapiens

<400> 737

gactgaggtg ccgtgtnttg gagtagtggt tctgtacct gtcaccttta acaacaatt 60
attgagcacc tactgggtgc cagatactcc accaggctct gagaggacag aaatgcataa 120
gacacaatc ctgtctctaa ggaggccttt caaaaagaag agagtagaaa aaattcacac 180
atttcccca ttcaaaatg acatctgaag 210

<210> 738
<211> 389
<212> DNA
<213> Homo sapiens

<400> 738

agcctgcatt aagcaactg aggagttcgc gccctctgtt ggtgttgtaa tcaccgccta 60
tgtggagatc ctacatctct gggctctgtc agtgtttgtc accagcctct gacgtgcatt 120
tataatcatc tgctggacat ttctacctgg gaaattgaa ttcttggtat ttgcataat 180
gtgttccaag tagagctaatt tgaagtctc tcaaaagaga atgtctatca tcttttttt 240
gtttactcaa aaagtccac catacaataa gctcttcaag aaagatttgt acttatgacc 300
ctgaatgggt tagtgtgttt atgctttgtt tagaggcatt gaattttgtg cattcaaat 360
acctgaaata ataccatcct ggaccggtt 389

<210> 739
<211> 214
<212> DNA
<213> Homo sapiens

<400> 739

agaactgaga ggatggaata aaaaccgcaa ctcaaacctt tcaagaggc caccagtcac 60
tagacactgg catccgttag aactgctgca agcttaaatc aaacagtcac ctggaaggaa 120
caggctcttg gagactcccc tctagctctg agatctgtat ttcacagtta ttgaggcac 180
tgttaaaagc agagaataaa atagttgaaa attc 214

<210> 740
<211> 216
<212> DNA
<213> Homo sapiens

<400> 740

aagagaaact tcatacagcgt gtgtcccgga gtgaggacgt ttggagcagg agcactcact 60
gccacctgtg atgggcatga agctagcatc catgaccaga gttttgtgct gttgcacat 120
tacaaaatga gcacaggagg gtggacggga gctctctgna cccttcactt aattttgctg 180
nggaacctaa aactgtttta aaaataaagt caattg 216

<210> 741
<211> 473
<212> DNA
<213> Homo sapiens

<400> 741

caagagaaac caaggngaa gagaccaaga aagaaatgag aaagagatga aagggtgaag 60
ngacagaacc ttctgagctc tcctttcctg ctaaaccceca ggcacatgct ccagattcct 120
taggcaaagg aagaaatgaa aggagagaaa gagaccacaaa ttttaaactc tattaataag 180
gactgcctga tatttatacc caaaagaacc aatgatgcca tgggatctaa ctaagatatt 240
aacagatatg aaaagagatt caacagagta gaggagcttc agatatatac ctgtcgtggg 300
ttggctctgn gcttccccca aatctcatgt caaaatggaa tccccacccc ttgaaggang 360
ggcctggggg gagngattg aatacgggan cnaactgncc ttgctttnt agcgatggag 420
ttctnagaaa nctggttgnt tgaaagngcg nggacttccc ctttctggct ttt 473

<210> 742
<211> 764
<212> DNA
<213> Homo sapiens

<400> 742

ctcgcggttg aggacaaact ttctcggggc ntttcangtg gggggaatcg aacgggaatc 60
cgaataaaag cttttggaat ggaagcccgg ccaccattg gggaaatccgg gccatttgg 120
aaccaaagaa tgggaatttg gcaacgcaa gggtttctc ccggggccgc ttgggggggt 180
tggggaagaa gggcttattt ccgggcttat tgaacttg ggccaccaac caaagaacaa 240
aatccgggct tggttcttg gaatccccgg cccgtgttcc cgggctggtc aagccgcaa 300
ggggggccgc cccgggttct ttttgggtca aaagaacccg aacccttggc cccgggttgc 360
cccttgaaa tggaaacttg caagggacga aggccaaagcc gccgggctta ttccgtnggg 420
cttgcccaa cgaacggggc cggttccctt tgcgccaagc nttgttcnt cggaacggtt 480
tgtacttga aancccgggg aaanggggaa ctggccttg cnttttggg gccaaaaan 540
gggccnnggg ggcaaaggna atctnccct ggncaattt taaaccctt tgggttccc 600
ttggcccgga ngaaaaagg naattcccaa ttccaattgg ggnntgaaag gccaaaatgg 660
gcnggggggg ggnntgggaa ttaccnccct ttggaattcc cnggggtta accctggggc 720
cccatttctg naaccaacc caaagccgn aaaaaaat ttgg 764

<210> 743
<211> 571
<212> DNA
<213> Homo sapiens

<400> 743

agaactgagc attttccaga ntattcaang cttcangatg ggcctgggat ctactnacc 60

gtttgccc atctgncgct ctattggccc acaagactcc aaaagacagt gatgataaag 120
gaagactagg agtgaaatct aatctctgta acattcctag atatcaggaa ggtcagaaag 180
cagaagtctt aggagcctgg acatttgcca ccaatgcctc tatgtagcaa tcctccttga 240
taaatgccc taaacagaaa tcaggagata atgggttcac ggaaatgaga gactagactg 300
cattttgctt ccagcccaag cctaacaaag gcaggggaaa aaggcttcat ttaatgaga 360
aacagagtcc tggaatcaaa aagctcttta ataacataac actaaattta agtcagaagt 420
gggtaatttt acttttgc atgatttga ctcatagaca tatctagtag aaggttgaat 480
aatttgaggt tatacctggg atgagtaaaa gggttaaagg atcagatcaa aaaaacaaaa 540
gttcaaatta aaaagagaag gttgtgactg c 571

<210> 744
<211> 396
<212> DNA
<213> Homo sapiens

<400> 744

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gagccataac ccgaggtccc ccaccccggt cattnccanc aanaaaaccg ggtccttgga 120
ccaanccacc acccagccaa gctnccaag ggcacatgaa ggggaagtcc cgcccaaaga 180
tcaagcaagc ccgggcaaaag cttgaccac aagcccaact tgcaagacgc catgaagcaa 240
agcctttaa gcaagcttga aaatccacca aagatcaaac ttggaaagtc tccaagttct 300
tggggtgcca agtatttctt tgtttgtatg cccaanaag tattgggggg cttctttgtt 360
aatttgatt aaattaaata aatcattggg gtaaat 396

<210> 745
<211> 211
<212> DNA
<213> Homo sapiens

<400> 745

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tagaagaact ggctttgca acatcttctt gattcgatt cagggcagat gttgtcttg 120
gaacctgtg tgaagcattt tagnatgag ttgtaacatg cacagcctgg ctagtaatga 180
gtttataaa ctgctgctta tgtgtctgt t 211

<210> 746
<211> 527
<212> DNA
<213> Homo sapiens

<400> 746

ggctacctgc acgagtnac ttgagggatg ctctcatgg atgcnatagg gncctttcct 60
caacctatc ccactnaatt aatggcncgc tgatcacaag tgtnatgaat agaaagccna 120
ggnaacatct taactttgca tgaattttat ttggctaac gaaggctctg cagaatcatg 180
aagcaaatga gaaagatgat agagctcctt ggcgngnaag cagatatatt gagaagatga 240
gaataaagac aaccgttgaa aacagtccag gaaaataaaa agcctggaca aataggatag 300
ttgtgctg ccttattact ctgccattgc ttcatagata tcagttcttc atggcttctt 360

catgcctcta atcaacagac ttacttggg acatacaaaa ccaagaatct agtccagtaa 420
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 ttgaagaaat tatttgaaac ctgtataaag gtatgattgg gaaaaat 527

<210> 747
 <211> 198
 <212> DNA
 <213> Homo sapiens

<400> 747

gagaggcaca acaacgattc tatgccaggg gaaagccgct gggcctgctc cgcctccaa 60
 ttaaccatt ttatctgaga ggctggaaag gaagaaggta caaggccagg ggctcagcta 120
 tgaaaacatg ttctgaatgg gataaaaaca gcagtgggaa gcctctgtct tatataata 180
 aatagtagat gttaaagt 198

<210> 748
 <211> 909
 <212> DNA
 <213> Homo sapiens

<400> 748

gtagaactna acntngcggg tgaggacaaa actcttcgcg ggncttttcc aagtgggggg 60
 aatcgaacgg gtattcnnaa taaagctttt gatggaancc ccccccatg nggaatcggg 120
 gcatttgaaa caaagaaagg gaattgncac cgccaanggt ttcttcgcg gcccgctttg 180
 ggggtgggaag aagggttat ttccgctatt tgaactgggg caccaaaaaa gaacaaaatc 240
 ggcttgcttc ttgaatgccc gcccggtgtt tcccggtgtt gcaaccgnc aaagggggcg 300
 cccggtttct ttttttca aagaaaacga acctgtccc ggggtgccct tgaaatgaaa 360
 ctgcaaggg acgaagggca agccgccggg ctatcgttgg ggttgccac agacggggcc 420
 gtttccttgc gcaactgtgc tcgaaccgtt gtcactgaa gccggggaag gggactgggc 480
 ttgctattgg gggccgaaaa tggccggggc aangatctnc tgcattctc accttgcctc 540
 ctgcccgaga aaagnacca tcatgggctt gatggcaaat agcggcgggc ttgcaatacg 600
 ctggatccc ggcttacctt ggccattcgc aaccaccna agccgaaaac aatnggnatt 660
 ngaagccgga ccaccgttac ctccgggaat ggnaaccccg gtctttgtcc aaattcagga 720
 atgatttctg ggaacnaaaa aaaacaaatt aangggggct ttgcgccaag cccnnaaat 780
 tggnttngnc canggttta aangggggcc gccaatgnc ccnnaangg gcgaagggaa 840
 ttttcgtcg tggaaccca ttingcgaaan ngncengnc ntttttcca anaattaaat 900
 ggggggggga 909

<210> 749
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 749

aggactgggt ggaggctatg tccgctccc ctggaagccc tcaaggaccc acagaagtct 60
 cgagcctgcc agtgtgcagc gggggacaca gatccgccct ctgcacggg agcatcatgt 120
 gaagtctaag aaagccctgc aggaccagcc gtctcacact tgcgtggaa aatcccatca 180

gcacacctct gactcccacg tgggaatcac caatcatca ccatcaaacc gccctcccgc 240
 aggcacaaac ggcaaacgca gccctcccgc caaggga ggtctcatcg ctctgccata 300
 gtctcaca atctccaaat acaaccaaga tgtgtctccc cc 342

<210> 750
 <211> 216
 <212> DNA
 <213> Homo sapiens

<400> 750
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 ctcactgnaa cncncaactt ctaggcttaa gtatccttt tgacttaacc tccagaacag 120
 gnttttaagt catgtgcaaa gaacttactt ctccatactg gaagtagaag ttctcaaaa 180
 atttaaaagc aaataaactt atacgtaatt tacttc 216

<210> 751
 <211> 875
 <212> DNA
 <213> Homo sapiens

<400> 751
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 ttcgaataag cttttgatga aaccgcgccc ccatnnggga atcggncca ttgaacaaa 120
 naatgggaat ttggcacccc aggtttctnc cggcccgttt tgggggttggg aagaaggcta 180
 ttcggtatt gacttggggg cacaacaag acaaatcggg ctgtctctg atgcccgccc 240
 gtgttcggg ctgtcaacc gcaanggggg cgccccggg ttctttttg tcaaagacc 300
 gacctgtcc cggtgccctt gaatgaaact tgcaaggac gaaggcaagc cgccgggcta 360
 ttctgtgggt tggccacnga cggggcggtt cctttgccgc caagcttggt ctccgacgtt 420
 tgtcacttga aagccgggga aaggggactt gggcttgcta ttggggccg aaaagtgcc 480
 ggggggcaag gatctcctt tcatctcacc ttgtctctt gccgaagaa aagtaatnc 540
 atcatgggct tgaatgcaa ttgcggggcg gcttgcataa ccccttgaa tncggetta 600
 nccttgccc attcgaacca ccaagccga aaacaattt cattngagc cgaagcaccg 660
 ttactnttg atgggaagcc cggctnttg tccaancaag gaatgaatct tgggacaaa 720
 aancaatna agggggctt tgcggccaa cccnaaatt gtttcncca nggcttcaa 780
 gggggccca ttgccccaa cggngaaag gaaatntcg tcntggaanc ccaattggg 840
 gaaagncnc nnnncttnc caaaaattaa atggg 875

<210> 752
 <211> 746
 <212> DNA
 <213> Homo sapiens

<400> 752
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 gttcaaaccc cnaaaaagcc aagggngggg gaatnaccan tntnaccna agctgggtg 120
 ggcattttcc caaatttctt gggaaagaac cccnaagaac caaaaattc cgnggagaac 180
 cttnattgaa cccanance ntnggaaat aaccggggcc ttgcggggg ccttgaagc 240

ttgggaagaa gtttgatggg caaaggtctt caagtcaaag ggcacttcaa gcttcaaaaa 300
 taccaccacc acctggttg ccattattaa gaagcttggg aaattaaggc aaaatatggg 360
 accagggaagaa tcttgaaatt tcttggttt gggaaattg atgaagggtc aaaaagtcaa 420
 accaaaaattt ctgaaagac gcttgcagg aagggttaaga aaagaaaagg tatcaagcac 480
 acttgatcaa gccagcctaa ctgaaagat gatgtattgg aaaggggaag ttgggagttt 540
 gtttgaaaac ccaagggngt ccatgatccc tcccacttg gaccttttt taaanaaaaa 600
 ttctgnggc cccgccattg gtatttaaaa atcctcgcca tcaagtctt tcttgcaaa 660
 aaaaaaaggg ccnnngggg ggccnatng ggggttggg ggtaaccag gngtgggnnt 720
 tnttttaaaa aagggggggg gggggg 746

<210> 753
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 753

gctacctgca agaagtcaga acttgagctc aagaaggaaa atcaactggg tggaccccgg 60
 ggccttnccc cacactnnn ccnaaagaaa attggcccc nccccttgg gaaagcgcca 120
 aaccnatggg ggccttcat tctttattg ccaccaagac attaggntt caacttccc 180
 gcttggcctt nacenttaag aatcattaag aatgccctaa naatgggagg ggcgaatgga 240
 ccattaaaag ctagctcttc ctttctctg gtgggnctg gngggaaagt gaccttttg 300
 aaagtaaacc cagcaaagta agcattcatc ccaacaaaa gtgggggatt 349

<210> 754
 <211> 275
 <212> DNA
 <213> Homo sapiens

<400> 754

atctttcagc ctgtgtgtc atctgcaa atgaaccaag aaacaggcat tctctttaga 60
 agaaaaatgt ataggaagcc tgctcagagg aagngagggtg ctccagatga cctctggaag 120
 tccctgccag gcttatgttt tgaattttt gtaacattt attatgtaaa acagacncat 180
 tagctatgtt tactcaggca catggaagaa gattgagaca attacctaaa aattcactgt 240
 gacttttcag taaatgttat taaagaaaaa gtggg 275

<210> 755
 <211> 768
 <212> DNA
 <213> Homo sapiens

<400> 755

atggagtctc gctctgttg cccagggtg ggaagtccag tgggcacgaa tctttgggct 60
 tcggttgnaa cctttcaact tccgggggt tcaaaggcga attttcttg gctttaagcc 120
 ctcccgaagt ggggccgggg aactacagaa agaacaaggc ttgaaatggg ttccaagtc 180
 tttcaagtc ctggtcctt gggccaaaca acttgggacc tcttcaaaaa gtctaagcca 240
 aactccttct tccaagccgc ctttgataaa acaaaccctc tcatgcttg gaaaccacaa 300
 gcaagtgggg gcttgtttt ctccctcatg cacccaagg gaaagcctt cctctttgc 360

cttggggctt tctttccaa gggccttaag ctgccaac ccattttaca cccattgccg 420
aaagcccaag tcaagtcacc ttgaaagaaa aagggaagac tcacaagaaa gggcccaaag 480
atgaaaaaga ctctttaaat ccttggggggg cttttgaag ttttggtt ttaagcaagg 540
gaaagacctt attttaaaa aacaaaattg gttacacaag aaaattttgc caagtttacc 600
aggaacaaga tggaatnaa aggacattta tnggncnnnn nnnnnnnnnn nnnnnnnnnn 660
nnnnnnnnnn nnnnnngnaa nggggggggg gggggggggg nttttttt tgngggttt 720
taaaaanggg ggggtttnt tttttnaaa aagggggggg gggggggg 768

<210> 756
<211> 612
<212> DNA
<213> Homo sapiens

<400> 756

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gtgatgccc tccacttaag ttctgcccg atgtgctgta agcagaagta acgtgtagca 120
cttccaggaa atctctttat aagacagttg tcagatgcca gttttttcc cttccactg 180
cattattact gccagggtca tagccattct gaggatttca gaaggctgat ctctggagaa 240
ctgagggggt cgaagattg acttctcagg agcagggctg agaatggaat gggcccttaa 300
tacctgacag ttcccaagc cctgatgaca caaagccagt gtaattaatt cagaacataa 360
ggcttctgat tccattactg actcatcatc agtaagtggc agcagcagca gaaagtcact 420
taagcttctt gtgatcatgg caccgtgatg ggcatcttgc atgctcctgn ctgctgacaa 480
tggcacatat ctgcagtac gtggccgct ttggaaagt agtagcntgg ggtagggnc 540
tttaaaaaat gggggtggga tgcagnttig caaangctgn gggtagaagn acccctgggt 600
gaaacaactt tc 612

<210> 757
<211> 139
<212> DNA
<213> Homo sapiens

<400> 757

ccgaagcaca ctgagatgcg cngnctggac nagnctatcg tggatggaaa tgggagttgg 60
tggaanagag tcactctgnt gctgctggcc gtacaagatc gctttccca aggaaataaa 120
ttacatttca ttctctatt 139

<210> 758
<211> 388
<212> DNA
<213> Homo sapiens

<400> 758

acactgaggc agtgggagag ctggaggagc ctgntacaaa cctcagccca ttatcatcnc 60
ccagctctgt cttnganaa gatgactgan aggaaggtgg tnttgagaaa acaaagcatn 120
canccttgt gaagcnganc cctaaggtcc cctctccagn cntggntgac ccanaccct 180
cntttctt cctgcentcc aactnaagg attggcctgt ttcccttaa ctatagctac 240
cactcagctn actcgtgaa naaggcanag cccacgcctc ctggcacaag ntcccttnn 300

gctacctaag gcaagcgaat gagtctttt catngtaatg aactgtattt cccttctttt 360
ggaaaaccng gggggtaaac aaataata 388

<210> 759
<211> 178
<212> DNA
<213> Homo sapiens

<400> 759
ttgcacaagt tgggtattnc ncaggtggac ccnttnaaa agatggnttt taaaaggaat 60
ggaccaanaa ttatttigga ttggaaaaga atggggcccn aaccaaaggn ggnttacctt 120
ggnttaccct ttcttaaaat aaaaggttt tcattcacct taggtttca cccattgg 178

<210> 760
<211> 586
<212> DNA
<213> Homo sapiens

<400> 760
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agggtttat tcccccccc ccaaggaatc ttattgctt tcttaangg gccccgggct 120
tcactttccc ngggaggaac ttgaagaatg ggcttggaaa aaatggaaag aaacaggggg 180
aaaacttigg gacccagaa gacattactt caggagggaa aagaacgct tgttgtgaa 240
agggcgggag ggccaagaag ggtcaagggg gggattcatc tattgaagcc accaagactt 300
gccacaagac ttccaagcc aacctcacc agaagccag ggaagaagag gcaccaaggg 360
gcaagaagtc tacctcatic ccctcaagaa agggaggtca aaccgggtgc ttgatactt 420
ggatttctg acctttacct ttcaagaaac ttgtggaaga caaataanat ttctatttg 480
taaggccaaa aaaaaaagg gggcccgggg gggggccant tcagnttggg ggacttaacc 540
agggttgaaa cttgtttaa aanggggggg gggggggggc ccccc 586

<210> 761
<211> 572
<212> DNA
<213> Homo sapiens

<400> 761
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atgcagnaag ggctctanc cncctacga tgctacngc aacaggatct ncaggccacn 120
gctenggcc aggtactcac atcagtgtt ctatcaacac tcaggacaga cccatagaag 180
aggcccaagc aggcctgga agtgcatgtg gaggccacca ggcaaggaat tctggagtcc 240
cagatcatat ctgggtgtcc atcagcatgt tacttcacat ctctgtacct cagtttattc 300
atctttcaaa tggaagcaac atatagagct gccttataga gttgctctgg gtattagatg 360
tataatatat gtgaactgct tggtagtgg cctgttatat ggnatgtgct caataaatga 420
nagntggta ttattgncat ttattatcat catcatcatc atcataatta aatattattc 480
caagccacaa tgtggttctn atagncaaca attatttaaat aaatgnaacc tttccaaac 540
ttccgatctg nnaaatttna aaaaatattt tc 572

<210> 762
 <211> 544
 <212> DNA
 <213> Homo sapiens

<400> 762

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gcagcctgca ttaacgagnc tgagatcaag tgaaatccaa tgacatcaat aatcctgaat   60
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agtgccttcc ttcaagatat ttctactgc ttctaaagag gatctcccat tggcttgga   180
gcagcgtgag aagagacttg tacacagaga ggctgggcaa cttgtacatg gttgcacaga   240
tgtccagagg cagtgtctgag atgtgaacac aggaagactg gattcagcat ctgtgtact   300
aaccaggaca ctatgaagtc tctcatacct gtggtactag gaaaatcaga gaaaattca   360
aggagggtgg ggcattagaa gctgactatg gaggaacccg nangagattg atttttggn   420
aaannaaagg gccnggcctt tgcnggtaaa aaaangggag tgttttctgg atgccaacac   480
atttggggcg ggcctaanat cangaataga tgggctggat cttcagnatg gacttaaggt   540
tctg                                     544
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<210> 763
 <211> 658
 <212> DNA
 <213> Homo sapiens

<400> 763

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ggctacctgc atnngngac tgagatggga gaaaaatgag ttcaatcagt agactcccat   60
gacccttca aggtgacca tcattctttt tccagaaagt ggcagcttnc ttatttggg   120
ataagcgacg acagacgaga aaccacaaag aatctgcaga cgcgagactc cctgacctgc   180
agatatacag ccatctccaa taagtctaca tttaactaa aacttctct gttgagcaag   240
cataatgtgg aattatgta gcaagacctt atgcactccc acaaatttc tccaataaa   300
aaaaactgtt atcaaaggat tgtcaccccc ccagacatac agcactgcag ggaaaaagga   360
gcccagacag ccgttgggag ttgacctctg gccgcacgcc tggggtcagt ggagatctat   420
gttgacttta tctgtgtgcc cttaaggag gcctcttct taaaataact aangngccnc   480
taaattacac ttactgnaa tgctggatta atggattctt ntacaaangn tgaaanacct   540
gggcttttgg cttcatgan cctaantta actaccatga agcttctgaa tctctacca   600
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<210> 764
 <211> 658
 <212> DNA
 <213> Homo sapiens

<400> 764

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tttgatggaa agagcaacca ggaatgagt ctacagctgc aaggaagtga attctgcaa   120
caaccaccag agcatggaag agaaccctga ggcttatatg aaactgcagc cctgtcaaa   180
actgattaca gacttagaag accctgagaa gagaactaag ttctttctgc attctgacc   240
cacaaaactc caaggcccga tagctctggg aaagcagaac ttggccttt ccaaaaatt   300
tctgcccttg gttttgggga tcatttgggc aagcccaggg tgctgtgcat gggggctcct   360
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ggaatcctga gaagggcaga aagccttggc cccagactca tcgtgcagca gctctgagca 420
gtatttcggc tgaggagtga ctcaagtga atattcagct gaggagtcct tggccacgtg 480
tcacaacct actnttggg ggcctggggg naaaaggcgg cntaaaaagg ttccaagggc 540
ccaacttga aatggncnctn attgcttggg tcacaccagg cggtaattha ncttctttt 600
gagctggttaa ncgctgncnct ctgaggctgg gngagaaaaa taccacaagg gcccaaag 658

<210> 765
<211> 507
<212> DNA
<213> Homo sapiens

<400> 765

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gtggggaaaa aaaaaagggt ctctatttaa naggtagccg ngagcacaca ttaacccat 120
accggaaca acatgaagct ctgggagtc naatgccttc ggctgatatt atttatggaa 180
gccaccana tgtttntc aatccanaa gccaggctg ctgaaatac tttcacata 240
anaatgcacc tacatcagga gcacagccaa aacctcagtg aaacatgcct ttactgatt 300
gctttctcgg ggggtaaact cccgcaaagg acaaaccag gacagtgagc ggggtgtgnt 360
gnttgttnt aaaaaaacg ggggctccc ggattnggt tctntnctt ggaagngcnn 420
cccctgcct nttttaaaa agnggttaa tgatgttaa gactgcctt tgactnggg 480
tgaaccagg tgccatgcc attctc 507

<210> 766
<211> 186
<212> DNA
<213> Homo sapiens

<400> 766

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catgaaacta agcattctgg ctccagagtc caggtttta actcaacgga atactcagca 120
atggtgagt ctacgccctg tcgtccctc ctgggtctca cagaatggaa ataatgtct 180
caactc 186

<210> 767
<211> 225
<212> DNA
<213> Homo sapiens

<400> 767

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ctatcttatg tagtactaa tttatgaaca gcttgggtat ctgaagttha agccagctgt 120
ttaaaccaga acgaaatgt ctatgggtatt aacatataag tgtaattaa ttaaattacc 180
agactacata cacacaaaa aaaannnggg cngggggggc caatt 225

<210> 768
<211> 290
<212> DNA

<213> Homo sapiens

<400> 768

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gcaacaacgg tcacatcctt tcccttctgt gtctcagcca cagtgtgggt gtgaacaaga    60
aaccaagca gcatcctcat cctatctgca gctacgatga ggactccaac acttcctcaa    120
ccacatgacc actcggattc aggtgctaaa gaagcacttg tttaaaatag ctaaattgtg    180
gtcctgaat tagctatgcc aactatttc agttacaagt cttcacaata tttattaaa    240
gtattaagtc aatgattaac actgagaata aaaaaatatt tgcccttct    290
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<210> 769

<211> 524

<212> DNA

<213> Homo sapiens

<400> 769

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gtcagacctg gagaagtgcg gagacaatgg tggggaaagc cccttacaaa accatcagat    60
ctcgtgagaa ctcattcaca tcacaagaac agcatgaaga aacggaacaa ggggaatgca    120
atctcacagg atggaaataa cctgtggtga attgttgcca tccagatcca cttttaagtc    180
cacatggttc attcattttg gactagatcc tggtagagcc cagtgaactg atattcttga    240
aatcaggcac agaggctctg aagtaatgca ttacatttgc atccatgatt tgcttaaaat    300
gttccattta gcccttcctc ccaggaaaca aagccagcag tatttgatta ttgaatagct    360
cgttttgat gcttaanttt ggaaaaaatt ttttaaaat ttngggaaac ttggnntttt    420
acaaaatgaa tcatgagttt ttttcaagt ttganttgg ctccaagggt tgaataaact    480
tanaagtcta ggatcattat atattagctc tattttacat gtc    524
```

<210> 770

<211> 173

<212> DNA

<213> Homo sapiens

<400> 770

```
ggccagacct ctgcagaagt ggtgtcaatc acttnactcn ttenttagc ctactgncc    60
ccccnnttan nanccnaaa aactttncca aaggaaatca aactacagaa cagcaacaaa    120
ctcaaaaaat taacatttgg cttttgtgtt attaaaatat ttctcagca gac    173
```

<210> 771

<211> 548

<212> DNA

<213> Homo sapiens

<400> 771

```
gtccttcat ccccaaacag gaactgctgc aaggcccgca gcagccatgg gtgagtggct    60
ctggagatgg ggtaagtggc ctacgcaccc cagaggaaca gctggcagcc tagtctcgg    120
gcagcagctc cactcagccc tggggaatga cagatacaga caaccagtta tgccagtga    180
gtgccctaaa ctagagatag ctggggcgct gtcagccacc ttaacagtga gaagaagcaa    240
caggatgaag tggaaacagc gtcacacaga tggagcctcg aatcccagca tgctagccat    300
gtgtcatctt catagtcttc ctaacgtctg tggcctcaga tgccacatca gtaaatggca    360
```

caccatatgt gatttaggct aagggcctga gtgtaataag ttgctaaga attatagccc 420
 ttcttaaata aatggagaaa cagtcctatgt tnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
 nnnnnngggg gggggggggg ccttttntt tgggntaaa ccgggtntt ttttaaaaa 540
 gggggggg 548

<210> 772
 <211> 532
 <212> DNA
 <213> Homo sapiens

<400> 772

cagcgccctgg cagtctgcat catttcgcca cagtgtgaaa ccattggctg atgtataaag 60
 tggagagccc aggaacctct caaggcccag ctcagcctc acctccctg tggctctct 120
 caagcagacc cataccaagc tctctgtgct ttggaaactg ccagtgaggt gaagtgggga 180
 ggcacggag cgacagccac gttgtatgcc tgctgcacga gccagaccgc aggacaatac 240
 tcaatgagag gcaccaaat ccctcctggc tgagctgatg atggtgagag gccacagagc 300
 catgaaaatg acttgagca gcctccatgt attcctcagg gttgaatcat tgtgtgcacc 360
 acanancaat tttntttt taaaaaaaag ntaaacactt gngaaaaaaa gggggtaggg 420
 ccnttcctt gtttgacca aggaacaaat gcaaaccaga ccctgcttct ntcaccangc 480
 anaagctgc tcttcaatt cagagatc ttcaaggacc caattatgct cg 532

<210> 773
 <211> 8
 <212> DNA
 <213> Homo sapiens

<400> 773

gcaagaag 8

<210> 774
 <211> 180
 <212> DNA
 <213> Homo sapiens

<400> 774

ccccctgcnc atgaagaagc ccattctgtg taggagagag tgatgccnac ncaccagaga 60
 aaagaaacga gagagaaagc agagagacag agacagagag agcgagcatt ctgaaggcca 120
 gtcctcttc cctgtgctt ccaggtcct gtgcttgcca ataaactgcc cttttcttc 180

<210> 775
 <211> 121
 <212> DNA
 <213> Homo sapiens

<400> 775

aatatgtga atcctaatta ccaactcga agtattagga gatgggacct ttgagaagtg 60
 attaggtat aaggatggag ccctcatgga ccgattaat ggaaagagaa gaaaagaaaa 120

<210> 776
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 776

```

ggctgggcca cacctctgct ccaactgaca cagcctatcc caggcccatg gtgcaccct 60
ccagcatgca ggagaaggga atgcctcctg actgaccaag gaagccacct gcaatctctc 120
tccagacctc ccgcctttct ggtccctggg ctccctgtga cctgtttccc aagtcctccc 180
ctccagggct taagagggaa gaagaagtga cataggacag tctctccccc ggcagcctga 240
aaggaccttt gtgcagaggc cagcatccag agcaggacaa cctcagttag gcttctctcc 300
aactccccct ttaccacaaa agccctnag caagctnggn cntttaaata aacanaance 360
ccaantgga agggggccctt gaagtcatta tggaacatcc tcagatcaan aaatgaggca 420
aaggtatttg gggaaataaa agctcaagag gggcgggaaag ta 462

```

<210> 777
 <211> 341
 <212> DNA
 <213> Homo sapiens

<400> 777

```

catctgcatt aagcgcantg aggctacatg tacacagttg tgcagctgaa gagaccaacc 60
agagctggaa tccagcctac attccagtca ccacgcatgt atccggacat aaagggagta 120
cttttecta atcattaaga ctcaatatga gctagtggga gatatgactg aagtcatgac 180
ccaatctaaa ttaacatcat tatataatca actgcattaa ctaaaaatgg caagtataca 240
gcctcaaatc aataaaggat gtatgcaaaa aaaaaaaggn nnnnggggnc nntnagntn 300
ggnnntancc aggnngaact tgttnaaaag gggggggggg g 341

```

<210> 778
 <211> 523
 <212> DNA
 <213> Homo sapiens

<400> 778

```

gaactgagga aagagaagcc agctctataa ttacacaaag tctccccacc ttactcatct 60
cgagtagtga ccaccgtgaa tgggtcccacc gccagcctct tgggaggcag ccgggggaaag 120
cactccatcc tgggacttag gagcatgaac tctggagaaa cacagacctg tgttcaaata 180
cgagtccact gcgtctctac aatgtgatct tggacacaga tccaatgtgc acagcaaggc 240
attcaaatag cacaaaggct agatcctcca aagggaatttc gccttcagct ctgactccca 300
gttccccagt ttacctgtct ggagccacca tttagaagct tatgtatata aagaattgct 360
gacacagaga cacgaagtga gcatttgctn gttggggaaa aaaggggcn taatntntt 420
naccaggaat tgccacaanc cttnaatgtt gtaaaacaag gcccaacaaa acaaggtatg 480
cggaagcagt ccaggcagta caatcagcca aaactgatta tga 523

```

<210> 779

<211> 507
 <212> DNA
 <213> Homo sapiens

<400> 779

```

agaactgagc acctctgctg attgtggtgg ctacccaag gcataccag atcctcattc   60
ccaaggaatc tcagtccttg gtccctgct gctgcattta accactatc atcaataaca  120
aacaagggag tatgaagaat gaattccttg cgtgacaaac atttttctcc ctgcccattg  180
tgcaacagaa gtgacacttc ctccagatat tcagggttaa ttacctctgc tagaattgtg  240
acttgaatta ctgttttaag ccaactcatt cttaataca gtcagactt ttgcctcatt   300
cattcgctga ttgtacaga ggtgtaagtt cagaggttgc catctagcct tctcactac   360
aatagcttta atccacaggc cnaggaaccn cgtgngaaaa aatnggctgg gttcccaaag  420
ngggnttttt ccaactatca ttcaggcnct ggaaaaaagg acttctgact gagtctggga  480
acccgatggc ncattgcaat ttaaaag
                                     507

```

<210> 780
 <211> 478
 <212> DNA
 <213> Homo sapiens

<400> 780

```

cagccggaat gatgctctga agacctgtt ggacagtga ctcttactc aaacctgcag   60
cagatggaat gatgctctga agacctgtt ggacagtga ctcttactc aaacctgcag  120
cagctggaac gatgctctga agacctgtt ggacatgca ctcttactc aaacctgcag  180
ggctcccgca tctctctgg agcagaagcc cacctgccag ctcatccga ctgtgctgtc  240
gcctctctt cccactggc tcagccatcc atcaggcctt gtgcatgca ctggccagct   300
cccttccag ggaacacttt tccctgcat ctacttgcc aacttctga tctcttttaa  360
ctcattcacc ttctcaangg gacagantaa cgctttggg actnaagncc aacantctng  420
accatctcc aangtttcta tcctngttg gtcctacag gacataccct atttgctt   478

```

<210> 781
 <211> 491
 <212> DNA
 <213> Homo sapiens

<400> 781

```

gaggatgcag cactggcccc acagcgcca catcctggct ctggaaacac tcggtctcct   60
gattcagtga ggctacacgg aagcatgagg ccagctttg ggacaactat gacatctgca  120
aggctgcaaa gaggttttag ggcgagctcc aggetggtct ctgcggccaa ctgactgtgc  180
gtcacgggtc aggagtcct gcagtagcca cagccgtgct cctgtaaaac gtttgtgggt  240
cctatgttta cattctctga ctctgaaacc atcgatgtca ccaaacacac tcctgttggc   300
ctgtgtttta cacaatcaa ttcagacaca tgaanatgat nangtgtggg gtgccaagct   360
gaaagtgcta ctttcagttt ggtaaaagna aatnntaaa agnactaact ttaacatccc  420
aaaaaattat tnttatacca aaaacatttt tagagattga agaacagtat aaaacctttt  480
cctgttctact g
                                     491

```

<210> 782

<211> 193
<212> DNA
<213> Homo sapiens

<400> 782

```
cctcaggtgg tcgctggagg atgaagatgt gtctgaggct gactgagatg agctaattggc 60
ctgtgccca ccagatacaa gaatgagctc cagccaagac cagaagaaca tccccctgc 120
ccaagcgag ccaaggtcaa cagaactgac cacatgaccc atggactcgt gagaaataaa 180
ttatggttc tgt                                     193
```

<210> 783
<211> 537
<212> DNA
<213> Homo sapiens

<400> 783

```
acgcctgact gaggctgtac aagatgngng gtgccagcat ctgcttctgg ggacagcctc 60
aggaatcttt caatcatgga agaagtgtc cccctggaaa tcagagaact gtgtgtatag 120
aagatggaag atgagagaga tatggaagtg ttattatgat ggaagtagaa atgtctgaga 180
aagtgaagat ctgagggtc aaaagttgcc tggagactct agactggaga agaatggaa 240
gtatagagag gttgaccagc tcaatcact ctctcaggaa gcttcagagc tgagatccaa 300
gtccagggt acttggttc aaggccagag cacttgtct agagtccat agattagagc 360
taggtattta tgggaaatgn ggnattctnt aaaatggta ccaggganaa ancttttggg 420
gggaaaaaaa ttgacctcc ctatcctct ccacatctc ttaacatct catatctggc 480
atggccacac agttcaaggc attcaaacga ttgccttcat gggtttctg ctgatgg 537
```

<210> 784
<211> 241
<212> DNA
<213> Homo sapiens

<400> 784

```
ctgttatcct cctatttga aaacggaggc acctgggacc cagctccagc aaggagagt 60
aggatccgac tcaggaggc acctcaggac caaaggcctc aaggccaaca cttccacgg 120
cacaagcccc acagggtgc aggaccgta caagcagcg accatccctt tcttcttg 180
actatgttt cccctgatgc ttgctttcc acatagaaga gttttccatt ttcgtgggt 240
c                                     241
```

<210> 785
<211> 308
<212> DNA
<213> Homo sapiens

<400> 785

```
aactgaggag ggaaatttgg acatggacac atagggaaga cagccatgtg gagacagagg 60
cagaggtgga cctgctgccg caaaaccaca gggcgccaag tactgtgggc cactgagaaa 120
actaaaggag aggaaggatt cttccctgga gctttggaga ggtgcggcc ctacttcac 180
```


ctggatttca gacttcagac ttccagaacc atgaaggaat aagctctctt tgtttcaaaa 240
 ccactcagtc aaggcacttt gttacaacag cctaggaaac taatacagga attggtatta 300
 gtaaaatc 308

<210> 786
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 786
 aactgagcat ctgectctg tgtccctct ttcctgttg tacggctaac accagatccc 60
 agtctcttca gtggcactca actttttcaa gtcacaagat ggaagcgctt tggaagagga 120
 gtaaaggacc tggactctga ttcatgcca ccgcaaactc gggcaggcac ttcaaagcag 180
 agagtctcat ttccacttc tgaaaaacac atggtctaga tgagctctaa gtcctttgca 240
 ctcaataatt tcacagtctt ttttattatt aatattattt tcaattgaaa aatcataatt 300
 gtatatttat ggggtacaat gtgatgttt gatatatgta ttcaataagg aattattaaa 360
 tcaagataat taacatt 377

<210> 787
 <211> 208
 <212> DNA
 <213> Homo sapiens

<400> 787
 gtaagcagac ctctctgtg atgttctgga tatgcctgtc tcaacagatt tcagggtggc 60
 cgtcttctct gcaaattcag ttctctgatg tgtccaagcc ttttctgcc tataaatcca 120
 gcctcttctc aactcaacag aacattcaat tttatagaat gaggtgttgc ctctattctag 180
 aaccacaata aaagccaatt tgatcttt 208

<210> 788
 <211> 523
 <212> DNA
 <213> Homo sapiens

<400> 788
 agtagactga ggcccaaaaat gcatggcaca gggaagggtt tgacaacttt ttgatggatg 60
 aacaaagaag attcaagcca cttgtcaaca agctcaaagt gattgaaagt ggaagcattt 120
 acccacacgc tcatgcagaa aatgacagga aatcatccag agacacttgt gacagagatg 180
 agaactgtca ctgttgagag gtgctgcgga gatgggtgtc cacggatgac cgttcggagg 240
 ccgacttcgg ggatgtggcc ccattagctc aagagtgggt gactccctac cacactgatg 300
 gcgttggcca ggacaggaca agcctactgc agtgacacag tgtcactgat ccctgatgcc 360
 cacgtgggng gtttactttn actaaagccg ggnanaaana ttgcaacaag anaattgagg 420
 cccagcgnat gagcagccca atcacctggt tgtaagcagc gaagtgtttt ttggctntgc 480
 tentgggccc caaaccactg tgggctcacg aaagaatctt tca 523

<210> 789
 <211> 501

<212> DNA

<213> Homo sapiens

<400> 789

```
aatttatttg actccaagtc ctgatcagg aagacaactc ctaaagataa caatcttcct   60
aaaggaaaat gggactgttt tacaaggagc cacagaatgg tggatctgag aatccaacat  120
agggaaaccc actgcttcat ctaccattat gcgcttgat atgcatgact tcagggataa  180
atgggagcca gaagtacaaa ggaatcttca gtagtagaca aaacgcagaa cccttcacgg  240
ttgaccagg gtcatttgtt gtctgcctgg tcatttgacc agctcttacg aatcaggaac  300
ccagctgaac ctcagttgaa ccagccctc caacagaact gaggggattt ggggctgata  360
agctcantgc tatgtttaca cgnncgctt ttntaaaag ttgcagtttt tgnaaatgga  420
anctatattt gggtingcata tgatttctat aatgnattac tgncccaccc ctgcacatcc  480
ttcagagaac agtaaccagg c                                     501
```

<210> 790

<211> 506

<212> DNA

<213> Homo sapiens

<400> 790

```
atatttcctc caggagtaat ggatgcctga tcacttgaga ttacatctgc ttcacgcata   60
caaaactgcat aaggcaatga tgttgcagag gctccacatc atcactcagc ttcagaacag  120
acaggagcag cagcaggaaa ggaggctgga aattaaatcg tgaacttttg gatttgtgatt  180
ttaaaaatat atctgaaatt atcatgtaca tgaataataa ctgtgaatag aaatagaaaa  240
gataaactcc taagataatg taaaaagcta aatattttaa atattcatct ttttatgggt  300
tgagtgaatg ttgatatct catgttatct tgattatctc tgacctctaa atacctggat  360
ctccaccccc tctatnttct tanatccctt tcccnaaaag ggaaaagcct gggctttaat  420
tggaggaaaa taancctaaa agcctggccg ataggggaaa tttttttct agttttaatt  480
tgaatattta tcatcaaact gaactt                                     506
```

<210> 791

<211> 421

<212> DNA

<213> Homo sapiens

<400> 791

```
acgggtctga agaagcaagg actggcaagt ctgatccccc actctgattc tcattgctga   60
atgtctgggt ctctctgtg tacctgctgg ggtgggagac tgctcgcagc atacctggcc  120
tatgacatgc ctactctct ggggtggatc ttggacagga agactgcttc tgccagagta  180
aagaatatga cggagctcct catccgatgg agcctctggg aagaggcgaa gagccagctg  240
gaagcctggg gggcctccgc tgccagcagg acagatgcat caagtcaggt ttatgggaga  300
agtcttccca gaccactatg tcaaacttc tgccatnct gctataaccn nttcnncgt  360
tnagtngngn ngaaaaccan accanttcan ccttggccaa aagctgcaaa gataagaacc  420
c                                     421
```

<210> 792

<211> 361

<212> DNA

<213> Homo sapiens

<400> 792

```
agaactgaga aacctgaag ttatttggat gatagataca gagatacgct gctcagatgc    60
ccctttcaag aaagaacttg ctgcctcttg ctcaagtctt ttctgggagc ttcaagcat    120
ctttgcaggg aagtcacatc ctcccaggg cagcccgact gaccaagaca ccgatacctg    180
aagctatgat aaccttcttg tgaccaggag acaacaagca gaaggccaaa aataccaag    240
aatggcagag cagaaggatg gaaggagctg ggcttcatta taacattgga gagtagccag    300
accaacaact ccagcaacca aataactctg tttctttt aaanggggta ttaatgacc    360
g                                     361
```

<210> 793

<211> 316

<212> DNA

<213> Homo sapiens

<400> 793

```
tctggtacaa tgctgtcgt cacataagtc tggcttctt atgtgcttga ggaaaaagga    60
ttgaaaacga agatcagaac ccagcgcacg acaatgggat catttttca gacacagcct    120
cctgttcat ggagctctgc ctttctgcc ggagcacga cctccgaagc cagcacaaca    180
gacctccag gctgccccca gtctctccc ctgcccttt gaacttaaca ttgcctgtta    240
gtgtgcctc tggatggtct gtaacctta ccatgctttg agtcaaactg gactgaagta    300
gacttctggt caaac                                     316
```

<210> 794

<211> 556

<212> DNA

<213> Homo sapiens

<400> 794

```
ggcnggtcna nccttnggt ttngcntaa nncngnccn ncngttnga aannggggnc    60
ctnagaaac naaaacatn gtanccntt gatccctna cggnggtcc caaaaaaca    120
ggaagctcg aggccatgag caaatatac caagcccaag tggaaaccaa gctgtcttn    180
ccccatcga cccggtggtg ctttgggcc attgggcag ttctcaccc gctgggggt    240
cttcgtttac cgaangtcac ctctacaaa gtacactcgn ggataatcta taaaagaact    300
cctcatcttc cttaagtggg ccctactct tcatggggct ttgggaagg ccctnttcc    360
ttgcttggt cttgggggtg gnaatctaac cgtgnggagc accccaang ggngaaaaa    420
accacaaan ggggnttct tgnaaaacc cnggctttt tgnaaaaan aacttttt    480
ttaactggg ggggnngga aagngnccc accctggctt ggtcaataa ataaaatggc    540
cggaatgtca taagcc                                     556
```

<210> 795

<211> 511

<212> DNA

<213> Homo sapiens

<400> 795

```
attaaaaaa gaaaatgtga atatgaaagc agagagtgag agtgaagaag gcacaaacag   60
aaggacattg ggaacaagca gccgctaac atcatcataa cngactcagg ctggatctga   120
gaaaaggaaa aaaagtggat aaagagtgtg cactctgtt ggggcaatga ctccggggcg   180
gaagaggctg aaagaaagga ccaatgcagg gaggaaaaga aattgcccaa ctcctccag   240
ggaatgtaga tgaaaacata tagacacaat tgggagaaaa ttggggcgag ctgatctgac   300
tatgaactgt ttgataaga tgaatgacca gaactcccaa tactncttga gnagaaaatn   360
tcccctgcc cctacaanaa naggtctnga anacactgtt tgaactcaga ccatcacaaa   420
agaacagtat gattattgac ttcaatgag ttcttaca tttatacct aattactatg   480
ctggcaataa tgattatgta gaccataaa t                               511
```

<210> 796

<211> 511

<212> DNA

<213> Homo sapiens

<400> 796

```
actgaggtaa gaagtctgta attttgactg agaatgaaaa ccctgctgac atgatgatt   60
gtggcagata atgcaactga ttccatagag atcgcttgag atcacaagtg atgtgaacaa   120
tcaatctgaa aaataaaatt tattcaggcc atcacttcaa gagaacacta tgaataggtg   180
ctgatctaa tgaccttca atggaatggc cacttaatc aatccaggaa atgttgaga   240
gtcaagtaga tcaagggaga catttaatga catggggaca agcatggtac cccagggata   300
ttccaggaat tgagacccta ttgtacctc aaacctgaga tgnatgaat tctccactat   360
ttggggggct tgggtncct tntctcccc tncaaaaaag gnctaaancc atctgcata   420
gctttaaata gaaaanctct attagcaaag ttgtaaatt aactcttaa ggctcttttc   480
aaggtagatt aaaaataagc tggaaccctt g                               511
```

<210> 797

<211> 525

<212> DNA

<213> Homo sapiens

<400> 797

```
agaactgagg ctccagggc tgtggggcca aatgtgccct ctctgccct catggcaagc   60
ctcagttect gagtttcat catttcttc ttgtacaat cagaactgag tctagcacc   120
ttcaggacaa atccagatcc ccaggagaga cagcctgatg agttcagctt ggaaagggtc   180
tgttctgtc ctatcagctg tggccagcgt gccagggtca cgtaccagtg cgactgccac   240
agcacggccc atctgtccag gagtagttct cagtcaacgg gctccagctg ggactcaggc   300
tgaatagatg cccacaagga tgtctgtac cacatgtaa gtgccccaaa gcaggacaag   360
ggctcaacna gggngggccc cgtttaatna aggggaattct gngtctgtct ganaanaaag   420
tgggcgatga gcaataacaa ggctgtcgt ccatctggaa gaactccagc caccctccaa   480
actttcaggt gcatagaacc acctggacat aagacacaaa cattt                               525
```

<210> 798

<211> 321

<212> DNA

<213> Homo sapiens

<400> 798

acaaataatc tctacagtgg acctcaagac ttcatactaa gattctgaag atgattgagt 60
caatggatga gtgtaacgaa cttttggaaa cttcaaggca attaaaggaa actgcaggag 120
gaccagaaaa gatcaagacc agggcacgag ggctgatcca aacaacgggg gccggcattt 180
gtgatcttgg gtagagccac cccagtgtgg gtcaactcca cagcattagg aaaaccagtt 240
tatcagaatt accttctcaa gcaatagatc tgttccttgt cacattctta gaactaataa 300
agacttatct ttattactac t 321

<210> 799

<211> 354

<212> DNA

<213> Homo sapiens

<400> 799

actctgcat taggttcaac tgagtttga gatcttcccc aatatgccca gtggattctc 60
ccaccagggc caggtaacct tctcaccag aggtgagcat cttgggaaaa agtacatcct 120
gtctttgcc ccagaggtga cttcaaagag gcaggtatgg tcaagagaga cactggaaga 180
tggaagtac ttcagtgttc cagttgctgg ttagccagg gcttcacagc gtggaagtat 240
ggcatcatga tgtctactgc acatctattc ccaaccccat attcagttgt ttcattagat 300
ctcttgaat ctatggaaac tagaaaacac taaaataaa gccttgattt attg 354

<210> 800

<211> 409

<212> DNA

<213> Homo sapiens

<400> 800

atgaagaaag tgaagtcag taaagatcaa gtagacctct catgtagaca gcgggaaaga 60
gtaagacta gaactcagat ctccaaacag ctacaacagc tctgtttcca gcaatgacaa 120
gttactgggt ccaagaatgc tcttcttgg atctcagcgc ctctctcagg accctctctg 180
cgttcctcac atgtccagat gccacgtgaa caatgaagct tccctgagct ggactgcaat 240
ccagcaagtg gctattcttt caacagtgga gactgggctt cgctgccagg gaaagtccca 300
tttaaggga gaatttgag tgggccggga ctgcgatatc ttgtgaccac agaaagatca 360
aacagggcac cttgagtatg tgagtctatg agttttacca ttgaaaaca 409

<210> 801

<211> 399

<212> DNA

<213> Homo sapiens

<400> 801

ggctctgct tagtcnaact gagatgcaga aaccggccc aggggaagacg cagcttgagc 60
aaggtcaccg gcagtttctt ttgcagtaaa atgggaataa aaagaaaatc tacataacag 120
tagatattct gtgaggatta ctgaattca tattgaaga gtgagtagaa gggttcctgg 180
cacaagctct acaagtgtgg ctggaatgaa tatgatgatg aggatgaaga tgaggatggc 240
ggggctggag ctcaagtgcc atactgtgtc ctggagcaga agccacgtgt tgaggacagt 300
ctggaccctt aacgaggggt gagccaccga caccagcctg tgactgttta cctcttgagt 360

ttgtttacag gagaanaaaa taaactctct ccctttgtt

399

<210> 802

<211> 292

<212> DNA

<213> Homo sapiens

<400> 802

actctgtatt agtnnaactg aggaataact ttctctatc ttcaccttcc cttttggcta 60
cagccttaag aagaagtggc agaaaaacat ctgagatgaa gagagaccct aggttcctga 120
catgtccagc ctctgagtca tagaggtcat ataaaaaagt aagagagaga aaattgtgag 180
agataggctg ccctaagagt ggaaggcatt gaatgttaca cacagtttgg agtcatttgc 240
agacaatggg tattaacctt tagttttggt catgaataaa tagcttattg gg 292

<210> 803

<211> 486

<212> DNA

<213> Homo sapiens

<400> 803

gtttgctgca tatggttggc aactgtgca ctggacaatg gaatgtggct gaccaggcat 60
tgggagagat ggaaatccaa cccctgaat gctcacaacc gtgcaatcta ccattccctt 120
catgaacgga tgccttctgc ctacttactg catggactag ctgcagtctt gtgaacataa 180
ataagaattt agcactcatg gacattgcct caatggatca acacaacagc ctaataagct 240
gagtcttatt tccagatga agaaattgaa gattataggt gttaagtac ttgctacaat 300
ttggaagcta gtgagtccag gtgtacagg gtaaggaaag cgctgcctat gcgggatgcc 360
cnacctnnng gnaaannctt tgggnaaaaa aatganccta taaagtccta ggaccaaggc 420
ctccttttgc ctgtctcttc gtctctcttg gacctcagg cgccccgctt gggtttgttc 480
caagtg 486

<210> 804

<211> 440

<212> DNA

<213> Homo sapiens

<400> 804

agaactgaga tgtcaacttt ttgtaagagt cggatgccgt tcttcgctc catcctaag 60
ggcacttggc catgtgcca gcaacattca ctccagaaag ggaatctgct tctgtgcaa 120
tagaactctg tctggaacaa ccaggagat gtttcatcc acatggacag anattccgg 180
cacctactgg tttcccacc cacactgagt gttgccctct aaatgagtca ctctggttc 240
cacagagagg tcagggtgtc ctcgaggagct ggacttcctg aattcactcc accacgttt 300
atctgtgtaa cttgtgcag ggtacctaaa atctctgtta cctcatctgc aaaatgggga 360
tacctaatac ttngagaggt ngtggtgaaa ttaaacgcaa gggcacttgg ccaggagcgg 420
ggcacacgat aaatccattg 440

<210> 805

<211> 513

<212> DNA

<213> Homo sapiens

<400> 805

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gagtgtgata tggcttggat ctgtgtcccc accgaatctc atgtcggagg tggggcctgg    60
tggaggtgac tggaccagtg tgctttcctg ttcttcagat tctacaaaga gaaacactct    120
gtttccaga ctgtcttaca gcaagggact tagatcccg cagccagagg cactcccg    180
agatgggcag ctgtgcagga ggcatctgtc ctgccgtgca atgtcaggc acaaccagtt    240
ttggagccaa cagtctgtac attgactttc tatccctcag acgccagcca aggcagtgcg    300
ttcctggaat caacgctctc aatagcagct tcccaatcct tggccaaagt gatgtcactc    360
aaagccagcg ggtatgacaa aagggnntnt cnacctnan atnggggnaa agttcacagt    420
accctggggn ggctgattnt gcagggtgtt tttatgcat ttctgaaggc caattaatag    480
cccattctc cagctcttcc aattatttt tta                                     513
```

<210> 806

<211> 161

<212> DNA

<213> Homo sapiens

<400> 806

```
ctgagagcca agaacatcag aggtgggatg atgatgcttg tggctatgag acaggatttc    60
aaggatcctg atgaaacgtc tgctggcctg tatctgtctg aatgctggaa agggctttgt    120
gttactcgaa ctgaaaggaa aacataaaat gatgataatg c                             161
```

<210> 807

<211> 488

<212> DNA

<213> Homo sapiens

<400> 807

```
gaactgaaat ggaggaaaga tctctcttca caagacttaa cattacatgg ctgggtgtgg    60
tggctgaaac ctgtaatccc tgcacactgg gaagccaagg ggaggactgc ttagcccag    120
gagtttgaga ccagcctgga caacacgttt aggagattat tgaacaaga accgaaattg    180
ctccttttaa atcagaaagc ttgacaatat gatggcaata taaacttacc agcaaccata    240
cagacaccaa gaagagccca tcgcaacccc tggggtgcgc ctggaccatc ctctctctcc    300
gaagccccgt ccagtattct tcagctccca agttcaagtg actgncgagc ctcacagact    360
ttnaaaaaaaa cttggttctc ntgtgggggc cncnctnctt tgacctcaca ttntcaagcc    420
gagtgttcat tgttgcggtt cttgtaatgt ttctgcagtt ctaataaaaa caggagccaa    480
aaaaaaaaa                                     488
```

<210> 808

<211> 362

<212> DNA

<213> Homo sapiens

<400> 808

```
attcttggc caggagtgtt cctgcctggc aaacaagatg tgtacctcgg ggtctacctc    60
```

atgaatcagt acctggagac caacagcttt ccctctgcgt tccccattat gattcaggag 120
agcatgagat ttgaaaaggt atttgaaga gcagtagatc ctggagctgt agtagacctt 180
ttggaaaacg gagaccctag caaggcagag acagaagcgg ctggacatcg agaggagtac 240
attggcactg gcagaacgac acggagtttg gccggggcag ttggaagaga gccggggctg 300
ccgagtggcc caactccagg ggaaaacat ctccctgctg gctcccccct ctgctgatag 360
ct 362

<210> 809
<211> 336
<212> DNA
<213> Homo sapiens

<400> 809

ccccggact gatgacgttt gctgtatcaa cctgtaagga gaagctctct ccggatggct 60
atgggaatga aagaatccga cttctactct cacacagcca ccgtgaaagt cctggagtaa 120
aatgtgctgt gtacagaaga gagagaagga agcaggctgg catgttact gggctggtgt 180
tacgacagag aacctgacag tcaactggcca gttatcactt cagattacaa atcacacaga 240
gcatctgcct gttttcaatc acaagagaac aaaacaaaaa tctataaaga tattctgaaa 300
atatgacaga atttgacaaa taaaagcata aacgtc 336

<210> 810
<211> 527
<212> DNA
<213> Homo sapiens

<400> 810

agaactgaga ctctttccat gatgagacta ttcacatcat ggcagctgag gactgagatc 60
ttttctatt gtggatgaag gaagatactg tgtgtcatca gaccaactc aggcctccat 120
tgagtcattg tgcctttaca ccaccaccag ggaggaaaat tacttacttt ctaccaagga 180
agcagttaaa tcgcaaagct caataccatg tgatgtgaag actcatttta gatcagccca 240
agaaaaacac cattaagcag agaccgagcc tgtggttgaa agatatggag tcacatggca 300
gcgccacac ctctcgaaa gctaaatcca tgactgggcc ttgggtcccg caggctcctg 360
cctggcctgc ccttntctgt gctgggaaaa tgggaaaggg acnttggggc aaaatnggag 420
gancctgcc ttgacaagg cacatacaan gggaaagtct gtcaaaaagc attngtttta 480
ctttctttt taaaagaaaa aaaaatactg ttatttactg ctttacc 527

<210> 811
<211> 398
<212> DNA
<213> Homo sapiens

<400> 811

gctcctgcat tagtnnaact gaggaatccc agtgattcaa gagtcattcc agagaaatac 60
acgactgaag atgactgggt acccttctag aaagagggga acaaggcctc cctagttcct 120
tttgcctccc agtgaataca ccgaggcaga agagccttcc ctagaaaatg tctggggcca 180
ttatcttcaa ggggcttcag aacttctaag aagtgtaggt atccttttgc aagggaaaat 240
gtatatgcct taacgtaggc gatttttgtg gcaccttct caatgaagaa aaggtgtctt 300

tttctccaaa ctaatttgct aattaaccta tcagtcacta ttacacatg aaacagaatt 360
cactccagat tgttcaaatg aaaaacattt ataaaagg 398

<210> 812
<211> 348
<212> DNA
<213> Homo sapiens

<400> 812
ggttctggtt aaagccaaaa ttccagaaaa gacaagtcag cactgcccac ggcaggata 60
cagtgtgaaa gcaactcaaa taacacctgt ttttgaaga tgccacaggc agagtgttg 120
agccagaggg ccaagacact gaggaagaag agccaagcta ctgctataaa gaaggagtgt 180
cccctataa atgaagaaca aagaagaagg agaatacatt attatctact tataaatcac 240
acagagacac aaaaatagtg aggtagttag tacgtaaac aggccatata ctagctagaa 300
aggcaagcc tactaaagaa aatatattga ataaaggaaa tgggatac 348

<210> 813
<211> 407
<212> DNA
<213> Homo sapiens

<400> 813
gtttnagtga ttgggcagag gtgtcatgtg acccaagacc atccaataag ccttgacttt 60
gggatttttg ttggaccgcc tgggaaaaag aagctctcct tccattggat ttgaaatgag 120
caaggcgta gtctggatct gcaggtgcct gccctgcggc cacatggaga gtggtgccg 180
aggactgaag ctcaacaagga gggaggcaga ggacacggat gtggtgagat acggtcctaa 240
cagcatcatt tgagccctgg attcagccct gcctgccttg aaaccaatac ataggcccca 300
aatatattat ttggaatata tatatttga atatatatta ttagaaacca atatattaga 360
aaccnatttt aaaaagctta taaatngcn gtgttttgt ttaatcc 407

<210> 814
<211> 442
<212> DNA
<213> Homo sapiens

<400> 814
ggtaatcact ttgatcagta tgaggaagga cacttggaat ttgaacaagc gtcacttgac 60
aagcctatag aatcgggaga acagatccca ttccaatcnt tgtcaagtat gatgtcatgg 120
gcatgggtcg catggaaatg gagcttgatt atgctgaaga tgctaccgaa cggcgccgtg 180
tcctagaagt agaaaaagaa gacacagaag agctgagaca aaagtacaag gattatgtg 240
acaaagagaa ggcaattgcc aaagccttgg aagacctcag agccaacttt tattgtgaac 300
tgtgtgataa gcaatcag aaacatcagg aatttgataa ccatatcaac tcctatgatc 360
atgccacna gccgagattt naagattttt aaccagaga gagtttgctc aaaatgtctt 420
ttcaanatcc cgcagggatg ag 442

<210> 815
<211> 405

<212> DNA

<213> Homo sapiens

<400> 815

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cacttggggc acatgaagac tttgtacgac cttttctctg aatggaaaat gaattctcct   60
gcactcagca tatcaaatcc tgagagactt tcttgaccg actttggcca cctcaatttc   120
tgaaatgta tactgattac ttcttaaga tattgtttgg cccaagggtca tgtaacatat   180
gagttcattc tgtgcatgaa gctccccaga gaacaacggg acacaatgtc agtttggtta   240
tggcatctga aaactcataa gagcagactt tcattaaaag cagtattacc cccagccctt   300
gccttctgag aattcacata tgaataatta ggagctgtga agtaggggcc tacctgnggg   360
acaaatttct cccngggtt ttngaaannn aaaaagggat tttt                      405
```

<210> 816

<211> 330

<212> DNA

<213> Homo sapiens

<400> 816

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gtttgggtt cggatttaag ctctactagt ccagggatca agtagctgct atggctctgt   60
ttcatgccct ctgagctctc aggagcgtcc agcagcctca gaactggagc accatgatga   120
caggaggaaa agacagctgg gctgctaagc agcagcagag gggacctcac gtgtataac   180
tacacatttg ggtgttctt tgtttaatgt ctgtctctgc catgaaatgc aagctgtaag   240
ggcagagcct gtgtcttttg ctcatgttc ttcccagca cctggaacac tgcatgcaca   300
taacaggccc ttaataaaaa ttggtgaat                      330
```

<210> 817

<211> 363

<212> DNA

<213> Homo sapiens

<400> 817

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aactgagctg gactggcatt ctatgctcat cctgggtctt tctttgtctg gttggctgca   60
tttgaagga cttgtctgaa cttgacctct ggttatgctc tgaactgtt ctcttaaaaa   120
gctaacatgg agtggctctg ccagccctgg caatgtctca ccacctgtgc atcagtcca   180
gccaaagtgg aagataggat ggaatgcctgc acacttaaat tttaattgt tgacatctct   240
aagtctggaa gtaattttgt caataatgta ttagagtac atagctagat tattctacag   300
taagtttatg ggttatactc agtttatttc attcaataaa ttgtataata aacacagatc   360
ccg                      363
```

<210> 818

<211> 433

<212> DNA

<213> Homo sapiens

<400> 818

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agaactgagg ttctaattgc caaactggca aagttcctgc tgttgccctc acctccaagg   60
ctggtgtctc tggactcagg gtgtgttcca ggtgcctgaa gcatggccca caccagaaaa   120
```

aggtgctctg taagggcaga aaccagggtcc tcacaccatc ggtgcatgat aaaaattaac 180
 tgaccaaata acacgggtgt accctcttca aggcaacttc ggagtcagac atgcctacgt 240
 tctcttctct gctctgccac atgtgtgacc ctggacaggg tcttccatcc tcttggcctc 300
 agtgtctttg ccagcaagct ggggaataaga atcctgtgtc atgggggtgt cataaggggg 360
 aatgagatg acctaaaggg ncatcttita acntaannaa atgccttca aagcaaaata 420
 aaaaaggggc tta 433

<210> 819
 <211> 88
 <212> DNA
 <213> Homo sapiens

<400> 819

gcataatttc agagaacctg taagaaacct cttaagcta ttgcaagaaa cactcacttc 60
 taaaaataaa gagaaatctg ttctcct 88

<210> 820
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 820

gcctatccac agctcttcaa ataaagcgt gngangnnag cnaaagtga ggggctcctt 60
 gagaacttcc cagggctaac cagctgctga ggagtggcct ccaggaaaga gagaagcact 120
 ctgattcagg cagtgtatta cacctaaaat accaactcca tcatacttc agaacaattc 180
 ttctagacct tgcattctaa tatggagtgc ttaactaaca acgaacaaaa cctctggatg 240
 gccgaaggac ctaggctata cagaaagctg tgaattacca atgagaacgc agtgagtcaa 300
 aagaataatg gaattaaata agttcagagg ctttaagtgt ttcttaaaac acttatctat 360
 gaaccctctaa tcttagtcat ttctggcaca gttggtattc ataagcattt gatcatcatt 420
 ctg 423

<210> 821
 <211> 234
 <212> DNA
 <213> Homo sapiens

<400> 821

ctagttctct tggagatgac tgatggcatg aattctactt gcatggagtc cccgagaaac 60
 cactctctt ctcaaaaaa gtacactaaa tctcaggaca aactgggatg accagttatc 120
 actgctgcca accctgtttt gtgaattcca ttaagatgt ccaactgaga acaaattatg 180
 tctcaataaa gattgtattc acagaatgat ggaactaaag ttcttggtaa attt 234

<210> 822
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 822

```
gattgaacc aaagctgcca ttactgcaag aattaatgct tattgccaag aaattcaa 60
aaaggaaact cattggaaat gttcagagag gaaacgatga cagtataat tccaaatatg 120
atgctttctc cataaactat ccatagagat ggcacagctc tcgatcaacc ttgcctggt 180
tggttgaaa tgttttaagt ctttgacata aaaattgtga aaggactcgt cgtttccaaa 240
gtgagatgaa gattttgtta ctgctgttta taaaatttt ttcgttgtgt tcc 294
```

<210> 823

<211> 451

<212> DNA

<213> Homo sapiens

<400> 823

```
cacgtggaaa gcaagacccc tgagggcgca ggttttagtc aacttcatt cagtgccgct 60
tctacagagt tgaacacttt ccggtacatt aaatgctctc gttggttcag aaagaacact 120
ttgaaaagcc tgtgtttga cgtctactca gaagtattgg aatcaatgaa gagtgggaca 180
ctgaatctgg atcctctcta aggaatcgtt tccagaata catcaaatgt tacctgcttt 240
gtaaacctct ccaattctct caattccctc tgcattcatt taagcactga ccatcagacc 300
ttcctgtacc tagacagcag ctttctattg gattctctgc ctccagcacc gctctcctcc 360
attcaaacct tcacaatcat tatctctaac gtgaagacca tgccgntca gggaacccca 420
gaagggatcn ingaaccttt ccaaaaaaaaa c 451
```

<210> 824

<211> 404

<212> DNA

<213> Homo sapiens

<400> 824

```
aacatttaag gaagtttcta tttaaacca gccttgagg gtttcatga caaggaattg 60
cacattggat gatcatttct accttttgca ataactactt cttatttgca agttgtgttt 120
aagtgaacaa agacaatgat acctgttga gctggtagg aggaagaacc agcgaagcgc 180
acagttaccg gagagggtat ttgcccaatg ttgagaaaca tatgtgtgta ttgaaaaaaa 240
tcacatcgac tcccaggaat cctgcaacat actgcaactg tgatgctgac cagaatgagt 300
ggagatttcc tcatgattc tctgtgtgag atgcagagt atcattccac ttgaatctgt 360
gaaaagtgtc tgattaaaaa tcatacngat aattaccatc cggg 404
```

<210> 825

<211> 387

<212> DNA

<213> Homo sapiens

<400> 825

```
actgaccgga atgataacga cttgcagcgc ggtgttgccg tccccacca cccctgtttt 60
ctgacaacaa gggagcgcgg gagaccggag cgtgaaccc aaatccctca gcagttgcac 120
ttcattaagt caaatgtga caagaagctt agagagcaac ttgcagatct gatcacacag 180
aacaatcagg gaggaaactt tccaggagt ggtcgggggt ggaggaggga ggggagggcc 240
anagatgtgt acgtacagg accaggacat gcacgggggc ctgtaccca cctgccagg 300
```

gcaggtgtcc tggctgatgg gagcagggaa gctgtccctg ggtgggatct gggaccctgg 360
gatactggga ccccatgtgg ggcctaa 387

<210> 826
<211> 335
<212> DNA
<213> Homo sapiens

<400> 826
gtaatacagc aattcactgt acgatttaca atggtgcatt agcaacccgg cagcagtgtg 60
atgtcagagc ctcaaaaaga cgtatgcaag agaagcaact gggcctgggt ctgctgccct 120
ggccccagt caaggctgct taaatgtcac caactccagt cctgctctgt tccacagcta 180
gtcctggctg tgattttctc ccaaatagga cacagatatt aactaagggt ctgggaagag 240
gaagcaaaag aaagagaaaa agcaaaactac tgaatgcact aaacattttt ttaaagtttt 300
attgaaagga aaatagaggt taactgaag gaaac 335

<210> 827
<211> 241
<212> DNA
<213> Homo sapiens

<400> 827
tgatgcaaga tggtccttc tgagcagagc tcccctcgct cagtgtcctt ttgttcacg 60
tagaagatct tcttgagggg actgtgtggc cagtgcagcc caggcctccc caccctgcac 120
cgttcaacag aagagcagct gacgcagggg gccctcaaca tgctcacca aaagtcagcg 180
agattctgca ccggcccact agccttccaa ttgtaaacta aaaataaaat ctggccagg 240
c 241

<210> 828
<211> 419
<212> DNA
<213> Homo sapiens

<400> 828
gcagagaaac agatgaaatg actcactgag gagggaagca ctgggatgcc tcctaacctg 60
ggacggcttc ctctctgca gctctgtgt ttgtcagtgt ctctctgga tcaggcaggc 120
ctcagacctc actaagctat tccactcaac tctttctcc cgtgcttctt gactccaagg 180
tatcaggcaa acttgttgat ccatttagac ttactctca cctgcttgt ctctttctt 240
cgcgcacacc agagctaccc agaaccgcgg tgatgccttt cctggcagg gtcaggccta 300
ctgtggcagt gtcataaacc ttcttaagc aggatttggt aagagggcaa aagctggcat 360
cagcaagaca tgttttggtt tagacgtctc agtagacatt gcagcaagtt aactattgg 419

<210> 829
<211> 440
<212> DNA
<213> Homo sapiens

<400> 829

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gtccttacct gaagcccaag gtgatttttg gccgctggcg acctgtgac cgttggcagt    60
gggtcagatg tggcactcag aattagggga aggattggtg atgccagaac atctggtgaa   120
gccggcacct caaggcactc ctcaagcctg gaaagcctca ccaataggat tgatccagaa   180
tatgttcag caaaaactac agcagagtaa ctttgacaag aaaaatgttc acttgctacc   240
taaggagagt ctctgtctcc tgacctctga atttcgaaat cctcagctct ggctgccacg   300
cagtgggaac cgaatgagat ggctgggcag ggttctgcaa cacagcagaa accccaggct   360
tccaagacc caggatcaga actgnataat gncacttctg cctcactttg gtggacnaaa   420
gatttcacaa agaattttt                                     440
```

<210> 830

<211> 464

<212> DNA

<213> Homo sapiens

<400> 830

```
acagagtctg gctctgttgc ccaggctgaa agtgcaatgg gtgcaatcag aatttactgc    60
agcctcgacc tcctgggctc aagtgtatcct cctgactcac tcagcttctt aagtagctgg   120
gactactgga aaattaacct cattcagact gaggagaaca gaaactctt gagaaatctc   180
acaaaatagc catcataatg tgaagaagcc gaagcagcct gtgaagaggc gctagtggaa   240
aggaactcag gtgccctgc cctcagtcct agctgaacte tcagctgaca gccatcacca   300
acttgccagc cacaggagtg agccaacttg agagtggatc tttagtccc agtgagacca   360
tctcagctga cacacatgg taaaaagatg aaccatcctt gctgatcctt gccagtgctg   420
cagatacata agcaaaataa atgggtttgt tggtttaagc cact                               464
```

<210> 831

<211> 480

<212> DNA

<213> Homo sapiens

<400> 831

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atcctcccat acagtggcag cctggggagg cattgccaac aattacaaca gcccttctca    60
tttgaattga atggaaggcc aaagagcatg aggtctgaag tttaggatgt gaaggagaaa   120
agaacataac ctcaaaaacc caattttaat gatatttaaa aggcctattc cctccagaaa   180
tgtcaacatt actcaggagt atagcaaaaa acagcctgga gtttcatga tgtgaacgtg   240
agaccaaagt cacactgagg agagattaaa cttggaacat gattgccagt aaagaagata   300
actctgcct agaaaaagcc cagctgggtga ctccggttac agaattcaca accacactgg   360
gttcacaagc cttcttccc acatggaagc cccctttct taaatgtccc agattctctc   420
ttcttagat tggatgccag tgcctcttct tcataaaaag tgctcagctt ttgaaaaaaa   480
```

<210> 832

<211> 319

<212> DNA

<213> Homo sapiens

<400> 832

```
tggagcctac tgacagcaac gtgacaaaac cactctcttg ttgctttct cctggactat    60
```

cctgaatggg gaagagaggg gtggaattac aagtaggtg cttcaattt gcataaccct 120
 ggataccccc ctgtgagggg gtgagggcatg tgaagccat ctgtgttga gcagaaaaca 180
 agttgagagc tactgaatca gagcattcac atcaaagaat gaatgcaaac tggtctcac 240
 caccagaagc catgttcaca gggagaagga gaatggacag agactctcaa ataaaccaca 300
 aaacaatggt gaaaaaac 319

<210> 833
 <211> 249
 <212> DNA
 <213> Homo sapiens

<400> 833
 gccctctgc gcaagtaact caccatcttc ctgtgccag ctatcaccac gacacctgca 60
 ggtgagctca ctgcaagctt ggctcgtgg tgctgcgcac agccctcttc agcacacagt 120
 gtcagaccg tcctataaan tctccagcca gccttggtt ctttcagtc ggcattctc 180
 atgcaggctg ccctgtctcc ttgcaacctt ttttctact ttctccaata aatcagcctt 240
 ttctgcct 249

<210> 834
 <211> 428
 <212> DNA
 <213> Homo sapiens

<400> 834
 gtggggnnnn taannngctg nttgaccgcc cncgtggagc tctggtgatt ttctgaggaa 60
 aangnactt gaccgactaa accgagagt cctcagagag caaatacca tcggnacgt 120
 acttctenct ttcagacgg gccttggnat gaaccctaac tgttcacaga ctctccaca 180
 ggccccattt ctatgcnatt ctgtggnct ctgantcttc atacccaaaa actangaaga 240
 acctccagag gggacacacc gccatnatga gagcctggct gganctggac tcnntctc 300
 tctgcaagat gaagcaccat ntcgaaatga acngcagagt cggaccccca ctgtggtcc 360
 agcgnngata tgaggtgtgg actggaatgc tctttgcat tatnactgg ggccatgatg 420
 tgccgaaa 428

<210> 835
 <211> 507
 <212> DNA
 <213> Homo sapiens

<400> 835
 taccactaaa agtggaaaaa cgattattg aaccagga ctctggcaca tgctttatga 60
 gattcatttc ttgcaccct cagttaagga aagacactac cattcaaata gacaagctac 120
 ataagacaga ctaccgtata cactngaat cagagcttc caatcaagaa agngggattt 180
 tgtctctct tttctgtta aagaacctg ggttaagac aagctcttc tacctataa 240
 aaccatttgg ctctaatca nattaaggaa gaaaaggga gaagcctaaa ggaaaatggg 300
 gtcatggcaa aaaatattc cgggacaaat ggtccacca tgaatggcct ggaaagaact 360
 ggcttctca tttttaact tgggggataa aaagaagggg acattcttc ccattcaaag 420
 gaagcttgc tcttgaatt tgggtctatg gtttcttg atgccattt ttacttaaa 480

<210> 836

<211> 447

<212> DNA

<213> Homo sapiens

<400> 836

```

gtacacctgg agtctaagc ccgggagaag agggcacagc cccacttct ctggtaccag   60
tagggccctc ttcagagaca gacgtgccta ggaagggtgca ggtcctctc tgctgaagat  120
cctcacattc caggggtgca agagggggccc ctgcaaagtc agtctgtcga gacctaatc  180
ttggtgttat ctacttaaca agtgaagggg ctgagaggaa ggtcagagt actaacaaaa  240
ccagtctga ggccttgaca cctgaggaca ggattgctgt caataaaaat gtagctgacc  300
ttaagagtc cagcctgaaa gaatctcaaa atggntctaaa gtatatggga agctttctt  360
cttattctgg taccttaaaa gagcatggca aagagcactg tggggcagaa ggaaggatct  420
gaaaattcca ttctgatgat acatcta                                447

```

<210> 837

<211> 453

<212> DNA

<213> Homo sapiens

<400> 837

```

gttccgtgtg gctgctctga gaattctccc accatagaga gatgggtgat ccctttgtc   60
tgcataagt caccaatcca ggcaccatgg aaggactctg tgaggagggc ctcccctctg  120
agaagatgcc tagccagcag ggacctcatg ctgagttca gatgggtgc cagacagatg  180
aaaactccag acatgacagc tctcctctg aggccttggc tgggttctc cagccacacc  240
agaacagcac cccacctgca acacacaccc tcaccaagc cccaccagaa tactgcacat  300
cggctatgtt tgcagaata caaaaacaga gacagtttc agaaagatat tctttattgt  360
cataagttgc caggggtggg atggtaagc gagctggcag aggtangan gaaattttg  420
gtccctggc tggagaagt atctgggtgt cac                                453

```

<210> 838

<211> 406

<212> DNA

<213> Homo sapiens

<400> 838

```

aggtgagttt ctgagagcat ctaacaggtc acccaaaaaa ggaggatgga aagagacatc   60
aagtcagaag aatggcactc acattctctc tctgctggag attaaccaca tgcccttcta  120
tgatgataca actgcagatg agcagagacc ttaaaatat gagctccagt cccaccttc  180
ctggccttgt tgtggtatag gactacggc cctgctcccc ttcttgagt caatctaga  240
gatctggcac atccttcagg ggagatctag aataattcac ctctttgac atgetattca  300
ctatgcttag gtgaactctt ttccagcatg ctccttact tcagctacaa tcttacttgc  360
tttagctat gcttggccag tcaatataaa cacacttga taccat                                406

```

<210> 839

<211> 116
<212> DNA
<213> Homo sapiens

<400> 839

```
aaccaggaac cataatctca cactgggatt atggactgct gtctctata tcaactgctga    60
gccatggacg gagttggaca cagggcaaat aaaatgccac aaagtttct accatt      116
```

<210> 840
<211> 392
<212> DNA
<213> Homo sapiens

<400> 840

```
atccagagga agaggagatc tgactgtcat ctgcacatgg aacaacagaa actgatttt    60
taagatatgg ttcatctga tgcactgtat cactgcctaa gacagcaatc cettgatgtg    120
ccagagattc tgatgccctt gtaggtgatt gctgggaact tgttttctg ttctctctt    180
tgggatcata attggaaagg tctgatcac aaataatatt tgatggatgg gcagcatttt    240
cggcaaggac acttgcagtt tctgaaatat ttaatttggc gattactggg gaagaaacat    300
agaattcatg gtctttgtct gtagcttctc taagatcatt ctctttctgn gaatattctg    360
gttgaccaat aaaagcaaca ggttgggatg gt                                392
```

<210> 841
<211> 444
<212> DNA
<213> Homo sapiens

<400> 841

```
atacagagtt gaagagaaga gaggcaccagg gatccaccag gcaactgcgt tacagaaaga    60
aagtcacgca caggaaaagc agatttctga ttctgccacc aggaagggtc aaagtctgga    120
cagcacttgg tcaggagcct ggcttccctt tcttgaaaaa catcatatgt aaacatctaa    180
ctgagagctt ggtacacagc aggctctgag tgttggcccc atcacgatga caaccaaggg    240
ctaattatga aataaggagg acacaagaaa agacactatc aaggatacag tttttttaa    300
aagggtgggg aaagttcatc tttttttaa aaagcatcca tagacttaa attttttgt    360
ttgggtctg taaaaaaata gcaatatggg tgaacgcta tgataaaaaa ttgcccaat    420
tctgttatg taaaatggt actg                                444
```

<210> 842
<211> 300
<212> DNA
<213> Homo sapiens

<400> 842

```
gttcaggaaa taactacca gaaaatgata tctgagcaaa gacctaaaga agaagcagcg    60
agctatgggg atatgtgcag gaagagtatt ccagacagag ggagcctcgg tgaaagaccc    120
tgtgtggga gcatctggc ttgctcatgg ggcacaaagg aggccagtcc acctgcagca    180
gagtcaggac agggctttgg ctttgtacaa gcttaattaa gacaaagaaa cagtaaaaca    240
```

cccagaataa aacactttat aatctggaga tcattaataa aactaaatac ggatttaaat 300

<210> 843

<211> 214

<212> DNA

<213> Homo sapiens

<400> 843

ggatcagttc ttgctcttt gaaacgaaga tgatccgtct cacactgaaa gtttcctatc 60
gtgaggttca gtgtcatcta gagtcaacgg atgaagtata agtgttcact gtggaatttc 120
tacaacacaa aaagaagagg ctggataaag aagataaact gaatttgaa actgttcctt 180
ttcattaaa aaatagcaaa aaagtttcc ctgt 214

<210> 844

<211> 422

<212> DNA

<213> Homo sapiens

<400> 844

gcaagcagaa ccttggatg gcttctcag accctgtcct gtcagactt cacttctgt 60
cacttcccc ttgttactg tgetccagac atgccactga ettgttggtc cagtagctc 120
cagtcttcat agagaaaact ggagaggctg tctaacttc acctcagcat tggccgtggc 180
agcgagggcc tgcctgtgt cttgtgcgtg ctcaccaccc ttctctgtt acctctgcat 240
ggcgataaaa cactaggcac agagactga aaatcatcca tcttccaaa cctcaccgaa 300
ttcacaactg gccagcacta gagaggaccc tgacctcatg gctgcacagt cactgggggg 360
tgcagacagt aaatccggga tcaactggaca agtcacactg caacaagtgc tatgggaatg 420
ca 422

<210> 845

<211> 463

<212> DNA

<213> Homo sapiens

<400> 845

tcccaactgn ggcaactggn gtanagcagc aatgaagaca gatgtagtcc tggcattcct 60
caagcttata gtctaataagg aacgtctaca ctgagaaaga aaaaaaagaa aagaaggaag 120
aaaagaagaa acccttctct gacacttcat agacaaaaaa caagaggaga tgattattta 180
agttcatcag tgggagtggc acctgccctg tctactctg gttactaggg aagtaacaga 240
ctccttgga aaaacaactg tgagatggag aggggaagggg tgaaactggg aaatgctaaa 300
tctgaattca gattatctgg cctcatcatt cagatatttt aagggataaa gggaagtgn 360
cggnnggaaa tctgaaggng aattaaataa ttggaagtta tgatgaattg ccattccatc 420
tgngtattgc cttaattctc tggctctggt cttctacctg cca 463

<210> 846

<211> 230

<212> DNA

<213> Homo sapiens

<400> 846

```
gtgatgtaat gaggactcat atatatgcac atggagtga taaatgaatt aaggaatgga    60
tgggtgaaaa caacgaactg tgaatggtcc agccatcacc aataagacac gtaacaactt   120
tcccacctc gcttcacgct gccaggcaac gcaggctggc attgtttag tgagttgctt   180
ctgttcctca caagccagga tttaataaca gaataaagga atgaactcgc    230
```

<210> 847

<211> 391

<212> DNA

<213> Homo sapiens

<400> 847

```
gcttgccctt tggaagcagc caccaggctg tgaggaagtc caggccacat ggaaagacca    60
catgtagata ttctgaccaa caggcctggt taacgtctca gatgtcatgt gagtgaagtga   120
gcaaccatat cctctagca cccagccttc gagtcttcca gctgagatcc caggcattgt   180
ggagcacaga agcgtcattc cccctttgct ctgtccaagt tctgatcca cataatccat   240
gagcatacta aacgattgtt gtataccact gagtttgggg gtaatttgc acacagtaat   300
aaacaattgg aacaaaaaaaa aaaaggccag ngnggccaat tcaanttga ntnaccnng   360
gtngacttng tnaaagggg gggacttccc a                                391
```

<210> 848

<211> 442

<212> DNA

<213> Homo sapiens

<400> 848

```
agagaagagg gtgtttccaa gggaaagctt cagaagccca agcccagcta actttctggg    60
aagccctgat gatacccca ggaacgcagc aactgcaaat caaacctcat caaatggca   120
ccagctgacc ctctctcca cccagggttt ctcaacaccc ctggcaggat gcgaggggat   180
gaggagtctt cgggcttga cccccgaact gtggtcatca ttcatcaga tgccagctgt   240
gtagcaacaa gagttgctat ggaaaacaac cactacagca acagactgaa atcactccaa   300
aaaaggagcc gncactcatt ccaccaacat accactgggg acgcgggaaa gcaaaaccct   360
tgggttaaga acaacattcc cactcccctc cccagtttcc atcctagtaa aaattctcgt   420
gcttgtttgc attttaagt tc                                442
```

<210> 849

<211> 106

<212> DNA

<213> Homo sapiens

<400> 849

```
gtgangacac ancaagaggc accaccttgg aagcagacag ctttcanaga ggagnngaca    60
ccttgatctt ggacgtccct gcctncagaa ctgtgagaaa taaatt                    106
```

<210> 850

<211> 438

<212> DNA

<213> Homo sapiens

<400> 850

```
ctaaacaagc actggcctca agagaagcaa tattaaaaca attgcagct caccaccagc    60
cgctgactaa cggcgccccc ctgtccaac agcccanct acngcntnga ttggacaaga    120
ggctgatttc agttancttc ctctgatga gaaaaccaca gccatggact gattctggcc    180
gntttacana ggntgngnac ttgntgcct ttgagtccta aaaaggaggt gtagggccta    240
attgtaatac atgtaaagt taattctnca ccccaaagca cacatggta tatnacaccc    300
agccgtgtta natgnacaca tgcctcaaga ccacctcat gagtattga agctcttcgn    360
ataacctgtt gactatnga tgtttggcc aacctgtca actaaaaatt tctgtntaat    420
tncctctctc cctcaaaa                                438
```

<210> 851

<211> 224

<212> DNA

<213> Homo sapiens

<400> 851

```
gaaatgaagg atttcttatt ctgaggaagg gagagacgcc gaggaagaca ggacttgagg    60
tttactacc ttggtatttc gaactccct ctaactgtt cctgtactag aaaccactc    120
actatggaga aggaaggaga ggggctgaac tgatggacaa acgttgtaa taataggtt    180
tatgtaatcc acatataaat aaattaatcg cctgactcgc tccg                                224
```

<210> 852

<211> 458

<212> DNA

<213> Homo sapiens

<400> 852

```
ncacanntga gatcttggt gnttatgaan canggaacaa gnccgnttt tnagaagcaa    60
gctcaagaga tgatgaatga aggaagggtg agctccgaag accatgaaga actgctacag    120
aagaaaacaa gctttcaata aaataaaaga gacatcaatc acacatttta cccatttatg    180
aaacatgctc aggacaaggt actcagacgt gaagaagcat tccaggaac catcttgag    240
aactggactt ggtaacatga gagctgggaa gtcccaattc ttggtcatga agagtctacc    300
acgaagagaa ttggttggga aaccagaagg ctaacttta catgaggcac cagggttat    360
gccccccaga ttttcagaga aggacaataa tggggtattt ctggatgttg aaatcctagg    420
attgatctga cagcacaac caaatgccag cagtttcc                                458
```

<210> 853

<211> 438

<212> DNA

<213> Homo sapiens

<400> 853

```
atgtttgcat cctgatgaac tgacaccact tggacccatg actcatacca aggaaataaa    60
tcaactggtc ctgtaactcc caccagaag ctgactcggc atgcgaagac agttccaaca    120
ctctgtgat ttcatctcca accaatcagt agcaccatt cccagcccc ctgcctgtca    180
```

aattatcctt taaaaacctt accctctgag ttctcagaga ggtggatttg agaaatatct 240
 cccatctttt ttcttttac aactggcaaa tatagatgag tctgtagcca taccagacc 300
 atgtggccca actttcacgt aacaaaagta agtacagnn ttttaagtt gccatnggac 360
 cctcaaggtc atgtaatctg agcatgccca gatggaccaa gtgttcaacc acagagggaa 420
 cctgattgct ctgactca 438

<210> 854
 <211> 160
 <212> DNA
 <213> Homo sapiens

<400> 854
 ttttattcac agatgaccag accaccagag agacctatcg aagtctacat ttcaaagaac 60
 ttgectcac ctgtgttgat aataggagga actacagcaa gagggtaaaa atttgtaga 120
 ataacttga taatggataa atctacatct gctatatccc 160

<210> 855
 <211> 138
 <212> DNA
 <213> Homo sapiens

<400> 855
 ctacctgcat taagtcanca actgaggaac caggnaacca taattctcan actagggnat 60
 tatggacttg ctgtctntna tancactgct agancatgg gcggagntgg atacagggna 120
 taataaaatg ccacaaag 138

<210> 856
 <211> 436
 <212> DNA
 <213> Homo sapiens

<400> 856
 gtgggggtctt ttagtgctg ttttcccgcc cacgtggagc tctcatcatt tctgagtaa 60
 aagtgaactt cccgactcag ccgcaagtgc ctgagagca gagaccatc gtccacgtcc 120
 ttctacttt ccagacaggc actggcatca acgctaactg ttacagact cctccacagg 180
 cccattttct atgcgattct gtgttttct gaatctcaa acccaaagac taaatgaacc 240
 tccagagggg accaggccag agagagcctg gctggagctg gacttctctc ctctctgcag 300
 atgaagcagc ggccgaaatg aaatgcagag tcgacccca nctggttgtt ccagggggga 360
 ttcaggggc atctgtttct ttcttttga ttctcagngg ataccatgtt gcacgaaatc 420
 tgtggctgct tttgtt 436

<210> 857
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 857

tgtgtacang caaatttctg ttgtgcctgg gaagaaggaa atttgagtta aagaggaggc 60
 ccgctccata tgcctgtca caagtacact cactgaaaca ttaattcacg aagagattgc 120
 aacaagacca aaacgaaaga ggaacagggc ctgacaatgt tcagagaagg aaagccgaag 180
 aagtaacat ccccaagtta aaaatgacgt ggggatgaaa aaataggttg cctgttgat 240
 ttgtcattga aatgcacaat ctgtttact gtttatctg agactctggg agctctcctg 300
 ctgcttagga aaaaagaggc aaaggnttan gaagaaatgc ttggccttan naaagagagg 360
 cnttagaac cctagagaga atgggaggng taaatagtat gtgggcattt ggcaatcacc 420
 acaaagaaat gggagacaaa aa 442

<210> 858
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 858

ttctccagc ataaaaacaa gacaaagttc ctgcagagct gctctaacc aataataaaa 60
 ttggacaata agctgcatat ctgccgaaa cctgggactg gcaatggaga tgagaagaga 120
 atcagaaggg atatgtctga tgacatagaa gctgtggaat ccattcttca gggctaaac 180
 tcaagcctgg tcttagttc tccgtactgt attcttctg acctccagac ctgagcgcc 240
 tcccttcaa aagacaaagc catccaaaga gtctgagcac tccaagtga cagctgaag 300
 agtgagagac gtggacagag ggaagggcag gtctgngcaa cctgngggcc taaaccca 360
 cctntggcct tntccagnga agccacactc angatttaag agaacttgtg atcaactgg 420
 ggtatttga cccacgaaa aga 443

<210> 859
 <211> 312
 <212> DNA
 <213> Homo sapiens

<400> 859

gtgggagat taatgctgtc ctcaaagtga agagtcacca ctactgtca agtcatgtca 60
 tctctgcagc cacgtgcatt ttgtaagctg ggaagaataa acagacattt ctgacattt 120
 tgcttgagat ttaacctcag cgcgtcaaga gatagagagg ggaacagaaa taaataaaat 180
 gtggctaaat aaggactgtt taccacaaac acaaggcaga gatctgggtga ccatatctga 240
 ctttgaaatc tgtgtctcca ggaagaggaa catcacacac cagggcctga tgtggggtgg 300
 ggggaggggg ga 312

<210> 860
 <211> 418
 <212> DNA
 <213> Homo sapiens

<400> 860

tgtctcagat ttcaggagaa ctgtgaccca tgcagggggt ttgagtccca gtgaaagtgg 60
 agacctgtc atcctgagaa tcgtccccag ggggaaacca tcttttcta aggcggaatt 120
 tctcaacggt ggaactactg acattttgga ccagtgttca tggaagcctg tgttgagaga 180
 gccacagagc aaagtatctg ggaccactga gtcaccatat ggaggagagc tacctggaac 240

attcaggggtg gacttcgtat aagtgaagg tcaacagatg tcctctctgt tcctgggtcac 300
 cgtgctaggt gtggaggaca cagagaggga gaagaccttt ntngctttt gggagctanc 360
 aagccggtag aaaactnta agcaggaaag taaaatgatc agggttttaa aactcaat 418

<210> 861
 <211> 262
 <212> DNA
 <213> Homo sapiens

<400> 861
 ggttgttagt ggacatcatc cgagcaaac ttgaaaagt cttatatgac tgggcttacc 60
 tgtacatgtt cctgctttta catgagaggc acatgcctcc aatataacca ctggccaag 120
 aaagatagga aatacatgga gaaaacctgg ttctatctg aagtttgag ccacccaac 180
 aaaaaaagc ctgaagaagg ggcaactcaa gccactcaa aacacatgag caagaaataa 240
 atgcctattg ctgatgccac tg 262

<210> 862
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 862
 gacaccacga ggcaaggaa ggaagagcga gcagatgtga gctcctaagc acggccgtct 60
 ccaccactg ctgcactcct cagccttccc agacacagcc tggttttcc tactgcacat 120
 ggcacttca tgaaggccg cctgttctca catctatctc ctgaaactcc ttaggagtg 180
 gagacaaacg ggcacaagta acttgagttg taaagttcag gaaaatttag ataagtgtt 240
 gatcataaca catcagctgg ttaatggac catcttcgca taaaacatt catccttg 298

<210> 863
 <211> 156
 <212> DNA
 <213> Homo sapiens

<400> 863
 gtctgagggtg aaaccagata atttgctgaa catctaagaa gcttttagga aactacactt 60
 cggaggagag tgctgtgcat tggaaaattg gaaacatctc aaatattaca tgaggctttt 120
 gcaggcggga ttaccacgca gcttctgct cctgcc 156

<210> 864
 <211> 12
 <212> DNA
 <213> Homo sapiens

<400> 864
 attcttgcca ag 12

<210> 865

<211> 180
 <212> DNA
 <213> Homo sapiens

<400> 865

```
gtgcttcctg tattaacatc cttgcaagtg gtacctgcct ctctgaggat ccagctacgc   60
aatgaatctg agaaagctta aaatcggaag tgctgctcta gtaatgggtc tcaaaccctg   120
gtggtcttga catacagggtc ttattaaaac acagttgctg ggctccacct aaaaaaaaaac   180
```

<210> 866
 <211> 182
 <212> DNA
 <213> Homo sapiens

<400> 866

```
gatctgggtt ggaactgctc tgcaaagata agtggagaaa actgtttatt tgtaagagaa   60
agaatgatga tggcagaaaa aggagagctg aatgcagtca ctaagaaaat ttgcaccct   120
gagactcctg accacgatcc tgtaacatta gcaattatga aaattattaa atggttgata   180
tg                                     182
```

<210> 867
 <211> 457
 <212> DNA
 <213> Homo sapiens

<400> 867

```
ggatttgcgt actctattat gaatttctct ttgagaaata atacctgtga gaatgctgct   60
ccttcaatta ggttcaggat tggaggaaaa atcatataaa atagtggta atctttcttc   120
tctagaaagt ggcaacgata tatagtactg ttgaacctat cctgccagtg tcaattcctg   180
aaatggcaaa agaaaaggga agaagagaag ataatgctat aatgatcagc tcccaaacct   240
ctacttaaag cataaatgga gaaaagaaag ctcggtgtag tgctacggaa cactattcgg   300
cattaagcag agtaaatagc ttagtcaaca gtgtgggcca ttgtcagtct ttatttgtca   360
tctctcactg agtgatcaca actcagcctc ttatgtgtcc tggaagtgtc caatctccaa   420
gttaactatt tattaagagg agatgcatct taaaagg                                     457
```

<210> 868
 <211> 259
 <212> DNA
 <213> Homo sapiens

<400> 868

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gaactccggg tgaggacgac aagagctgag ctcggtgtct tgccttctgc actctcgga   60
ggaggcacca gcatgggcac ccttcacagt tcgggccctt cactcacaaa cgtctggcac   120
atggaaacaa gctggcaaaa agattgtttt ttcttcctg actttttgtt ataagcctgt   180
ggtgaagtgt ccatacttg cataaatgaa tgtgagtgtt cttgggaatc taaatataac   240
atgtttctaa gttacacac                                     259
```


<210> 869
<211> 436
<212> DNA
<213> Homo sapiens

<400> 869
gaaggaggct gccctgcctg gaggtaagag tgcattggagc agtctcagcc gaccaggtg 60
ggatgcgtaa catggccgag aaatccaccc atgctgctga gagctactgc gccatggggt 120
catgtgtcac ctaactgact tagcccagcc tgactgatcc cccgtgtgtg accagacatc 180
agcacattca gaggacctca tactgggaat tgggtggacct ttcagaatgg acatgaccac 240
tcaaagtagg gacattactc gctatttgat ggcccatgtg ggatcaaagg cactgggggt 300
tcctcaagg cacagcacac ttagaatccc ataagtcctc agttctaagg catgtatttt 360
tcatactttt gataattctg aaatcaaagt atagctttct agtagatatt aaaactcatt 420
ttcagaatcc tgcaga 436

<210> 870
<211> 458
<212> DNA
<213> Homo sapiens

<400> 870
gcctgggatg acctctgcct gtttcaacc attattgatg cgcaattat gagaggatga 60
tgtggcaaaa tgattgaaa attggaagtg atttactgca caactaaat atttgtctt 120
atcattacag caactctata agtaattaat tctggcacca tattttacaa agaacttga 180
caaattggag cccatccaga ggagaacaaa caatcttgat aagggtctgg aaaccacaac 240
ttgtaaggaa tgatggaaag agctgaggat gtttacctg gaagagacac attttaagag 300
gaacatgata gcttttttaa aaactactga aagaactgtc tgggtggaaga gagatttgat 360
ttattcaatg ttactctgga gtatacattt aaagccaaag agtaaaagtt aaactctaaa 420
ttctctatga tctaataacc aaactttccc aaaccaac 458

<210> 871
<211> 450
<212> DNA
<213> Homo sapiens

<400> 871
ccttgagaca agaactcaac ctggtaata ccttgatgtc ctgaggctta tgatctctg 60
agaagaaaat ccagccacac caggacaggc ctctgacca cacaactgtg agctcatgaa 120
tgggtgttgt ttacagct cagtcagtgc tgtttgtta cagagcaaca ggaaacgaat 180
acccctcca cgcagatctt ttctagagc aattaattat gcatacggaa cggatgaaat 240
gtgctaaggg accagtgaag aagctgacgg tgcctcagg atgaaataga gagggaaaga 300
aatgctattc attccacaaa cattccacc cccanggaag gccctcctc ctgcatntag 360
ccacgattca aggaaagggtg aactcacagg aaaaggagac taaagttctg atagaggaac 420
tttaccata ggctaccage cattctttcc 450

<210> 872
<211> 426

<212> DNA
<213> Homo sapiens

<400> 872

```
aaacctgaga ggaagcagaa catgaaagca agaaatctga gagcaaatgc agcctttaga    60
tgagcttgaa cacagaagag aggcgatcag aggagaagat caaaggctgg ggaaggaggc    120
tcacaaggac tccccacacc agctgacagt ctgtgcagag caggcctgtg ctctctccct    180
cagaaggcag ggctctagca gaattattgg aataaggcat ttctctctta atacagaaga    240
atgaacagtg tcatgtgtgt tggttaattg taattgctag attgataaat aaatagggca    300
tccaaattca ttctttaat tcttacccta attttgcat ctccattta taaaatattt    360
taatcatgtt ttatatctaa gcttatatgt ttgtgatatt actatcaaaa aataatttaa    420
ttagcc                                         426
```

<210> 873
<211> 321
<212> DNA
<213> Homo sapiens

<400> 873

```
ggtctcactc ttgtcaccca ggctggagtg cagtggcgca acctcagctc actgcagcct    60
tgacttccca ggctcagaca cagactcaga aacttgagac aacgttgccc aagatcattc    120
cacactgaga aaaaaacaca ttagaggcag cagtgttttg aatagggtgca tggttagtgt    180
taaataatgg aaagaaattg gaacaagagg caagtgtga agtaaaagtc acaccctggt    240
atgaaaacct gttgtcactg tagcgaaact tgctaattac agaccggctc catcagtagc    300
ttcacaatgc acaaaatcac c                                         321
```

<210> 874
<211> 371
<212> DNA
<213> Homo sapiens

<400> 874

```
aaattcctct ttccctga agaaagctgc ctactgaag gacactccac ctcccaagg    60
gcagcctaca atgggtgtcca tgctgagcac acctcctggt gaacctatgc actcaaatct    120
ctgtccagca cctgcttctt ggggaatcaa ccgaacagat gatgccagga gtagtctgag    180
aaagaagatg ctaagatggg atctgaggct gccagctgac cactgacagg caatgagatc    240
cccgttaccg ttggtacacc gagctgataa agcccctgac acaagatggt gatgaaactg    300
gcaaaaactc caatgggggt taaaatggan gggnttacag ggggaaggaa atngnntttg    360
gggtaaaaat a                                         371
```

<210> 875
<211> 433
<212> DNA
<213> Homo sapiens

<400> 875

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cacctgagca acacagacgg tgtccttgtg agagaaacaa gcagcttgtg ccctcagagc    60
```

aggaagacaa agagtaaagc ctttatccca ctgtttggac acacagtgc tccatctcat 120
 tgaagcctag gtgatgact taatcacggt ccaggatcca ccagctatgc aggctcgggc 180
 tagaaaacag attgcttcac accatccaga gctcttcagc agcctcacat tgcagtcagg 240
 ctgcaactgg acagatggca tgcagggctc agatgtggca cagtgggaa gcatctgggt 300
 cccactcagg atacaacatt gaaaacatca gccacgccct gctggatgag ccagggtctg 360
 atgaacgggg acttgctcag cctacaggtg tccccagcc atcttttct caccagcaca 420
 aaagcttcac tcg 433

<210> 876
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 876
 gtctgtggtc tcgggggctt acatgaatga agcttcgcag accttcgca ttggccttct 60
 tctctttctc tacaggcagc aaagaatatg ccatctacag ccttgcttag caacctcagg 120
 agaaaggag ctctcttctc tctagagtc atagtgaat ccagagaag cgttgattag 180
 ctgtgctagg gctccatgcc catccctgta tccagaggga catgttctac aacttcgtgc 240
 aaattaaaa caacacattt ttgaggagga cagtagagta tgctgggcaa actaaataaa 300
 taaaaataaa taaaccaaag tccactgc 328

<210> 877
 <211> 404
 <212> DNA
 <213> Homo sapiens

<400> 877
 acaccaacca aatgctgtct ttgaatgtac ctactgacat tctcaccaga aatatagaaa 60
 tcatctgttt tcccacaacc actccaaaaa gactctacac atactggatt taccactgtt 120
 cagggaaaaa gcaagatcat ctacagcatg ggagcaagac ctgtgatgcc atctcttgg 180
 accatctcat ttttagttt acttttcgcc attttatag agaaaacctg agttggctag 240
 tggcagaatg gttggagctg ataactgcaa agagtacatg tgaaatgcta atatccatgc 300
 ctctgaaaca ggatcattac acagagggtt ggggaactcc agttattaag tatatgtaac 360
 tcccattct taataatgat attttaata aactctttt tctg 404

<210> 878
 <211> 450
 <212> DNA
 <213> Homo sapiens

<400> 878
 gtggatgatc aagagccctc atctggaatt agacctatct tgcctgttca gatccctgaa 60
 ggagaaaaga actgctggtg tccaacctc aacgcagcaa gttatttta tgtgttttac 120
 atgatgtct gatccaaaag ctggtttttt aacaacaaga ttcacaagac gaaaaaatat 180
 tttaaaaata tggattgact gcttgagaa aatttaaaat cttttgagca gcactgact 240
 tgaagtggaa ggatataagc agtgggagct gaagttatc agatacacag agcaaggcct 300
 tcggacgaga gctttgatga gtctgaagc aactgaagtc atgaatacgc ataagctata 360

acttacaagg caagctattt gggacagaag ataaggcatc cacttcttag gaaaaatgag 420
ctacgcgctc tacggtgtct ggggtcacat 450

<210> 879
<211> 458
<212> DNA
<213> Homo sapiens

<400> 879
ctatcctact ttggagaaga cgctggaaat tcagagtttc tgccagagaa tatatgcctg 60
aactaaaaga ggaagtggcc tataggagaa aatgaaatat gattgtccct tcagtgggac 120
atcatttgtg gtcttctc tccttttggat ctgtgcaatg gctggagatg tagtctacgc 180
tgacatcaaa actgttcgga ctccccgtt agaactcgcg ttccacttc agagatctgt 240
ttcttcaac ttcttactg tccataaatc atgtcctgcc aaagactgga aggtgcataa 300
gggaaaatgt tactggattg ctgaaactaa gaaatcttgg aacaaaagtc aaaatgactg 360
ggccataaac aattcatac tcattgngat tcaagacatt actgctatgg tgagatttaa 420
catttagagg tgacagcatc cccacactg gcagtgtc 458

<210> 880
<211> 274
<212> DNA
<213> Homo sapiens

<400> 880
aatgacccca cctggactcc tgcctcaaga cttaacatcc tgtggcccta tgcagaggca 60
gactcatcac accaggactg ttttccacac tccaatcatt tttttccct gaccaatcaa 120
cattcccat tccttagtcc cccacccatc aaactatcct tgaaaaccct aaactccaag 180
cctttgggga aatacatcaa ttgaataat aactctgtct catgcatggc atggccagcc 240
tctgtcaat taaactcttc cttactgca atgt 274

<210> 881
<211> 265
<212> DNA
<213> Homo sapiens

<400> 881
ataaatatgt actcaaagca ggtggctcaa tccacttate agcatttggc ataccagggt 60
tcaatgggta atcacaaga agaacggggc agagctagag aacagagaga acgcttttg 120
tgactcaagt gtgcagaagg taatcaactc ttctaagga tcagatgatg ccacttggcc 180
ctacaatgtg atatctttag ttcttcatc tcagtaaaac ttttaagac tcagcctcat 240
ataatagaat gttactcaac atttg 265

<210> 882
<211> 278
<212> DNA
<213> Homo sapiens

<400> 882

tctctgcacc ctacaatata ccaactggca gttccatcat ttgaaagaaa atcttcaagg 60
taaagacatt tacaatgaca caaaaacctt tcaaaggcat catggctcta aagggtttc 120
cccaaggagc agcagagtgt gttccaggcc ctgacaagag gtttaagacc tgtgacacag 180
actgaagctc tcttggcata ctctgaagct ctctggcac cctccccttt atgcttcaca 240
ggtgtttctc ctaataaatt tctgtatgt ctcatccc 278

<210> 883

<211> 312

<212> DNA

<213> Homo sapiens

<400> 883

gttttccga ggtatgactct ggctgccctg acagccccac cacaggggac agcagcatt 60
atttgacttg actaggattg gaacttcag tgatctacaa tctccatag atctctgttt 120
ctacaaggaa gcaccttctc catgaatatt atgcacttag ttaactgag ccatggaaag 180
ccaatcattc attcaacaaa tatgtacaga gtgtcaataa tgtaccaggc aagaacaag 240
gagctgcgct ctttcttcaa ggaatccata gtctatcag tagaaggaat aaaatattct 300
aagtgtcttt gt 312

<210> 884

<211> 123

<212> DNA

<213> Homo sapiens

<400> 884

ctgtatcaaa tctggattgc aagctggcct tctgattgaa gacgtcagga atgacacaca 60
acagcctacc atctcattt ccaactgtct gctgaccagc ctaataaat aactttaatt 120
ttg 123

<210> 885

<211> 450

<212> DNA

<213> Homo sapiens

<400> 885

ctcaaaatca cctgtgatat ctgcagctgg ctttgcagag cttgtagatt tgggctgttg 60
accaagacag aagggaatc agggatcgtg tctgcagccg aagaaagaag atgcaggcga 120
tagaggaggt ggagaaggag tagctgcccc ctcttctcta cctgatcatc agaggggaag 180
aagccaagac tcaaggagt aagaacttt ccaagggtag ctattagcca ggactcaaac 240
ctacatactt gaatgaattt ctacaacctg ttattgaaga ctaaggaggc ttctcagcct 300
gggctggatc ctggacagac aggccaggc aggctgtgca ctgtgacctg gggccttgc 360
tgtgaacaaa gaggactca agaggagatg gcctggagga gttcgccttt gtgttcatt 420
tgcttcagtc cgtgacaacc tggtctctgc 450

<210> 886

<211> 478

<212> DNA

<213> Homo sapiens

<400> 886

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agcgtgaagat ctcaaggac tgtgtgtgt tcatcttgg actgtgtgac caccacacc 60
ccatgctgaa cactgtacct ggcttagtaa gtttgctaa attcatggat gaatgaatga 120
aatgtgaaga agtccggat gatgccaagt tgcaaggga agccaagaac tgaggggaac 180
tttgggagg catgaaatgg aagacaaaa aagccactct gcctccatgt actcttcgaa 240
cttccaana ataccatgct ctcttgagg actttgcnc caanacaggt nttctttan 300
anngggcncg ggggccaatc ctggnnaatt tcttgggcct tggggttgna aaaaagnct 360
nccttgggaa gccggcccca aaaaancctc cggttgggga angggaaatn cccttttnc 420
caaaggggtg ggccgggacn ccttccctt nggggggaat tttttccc taaaacc 478
```

<210> 887

<211> 616

<212> DNA

<213> Homo sapiens

<400> 887

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tccttctct ctgaagccag gatgaaataa cggtgcgatg taatacaaca aaccatatac 60
ttccaagttg aatgacagt aaaatggtgt gatcttggt cactgcagcc ttcacctct 120
ggactcaagc aatctctca cctcaggctc ctgacacacc agttgcacat tcaggtgaaa 180
attcaggaag aaaagaagcc gtctacatcg cggtggatgc cttggcttat gaaaactttg 240
tgggttcttg gtctcgctga ctcaagaat gaagccgtgg acctcacgg ctggctgaga 300
ttttatatac acaaccacag ctgtagaccg ggatatttac tgcagtgccg tctgagatgt 360
taaaagaata taccaagccc tattaattat tcagaatata ggagtgatgt ccttctctc 420
aaagcacata tagttcacat cccaggctt aaattattat tattgctatg ntggagctgg 480
gtttaaaagt tcgtgaggag tgattggtaa aattcanga attngcaag ncagttggta 540
acacaacct tatgtaatta tagaaactta caattaaata aattatgta aaaaccaang 600
cataaatctc taactc 616
```

<210> 888

<211> 427

<212> DNA

<213> Homo sapiens

<400> 888

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gcttgaaccc agtgetgacc cctcccaag aactcttgt tcttgctcc agaggattgg 60
aactgttcca ggggtagcac ttagagagca ggacatgcc ataagctga ggaaggtact 120
gcttacaaga aatgagtcac agcaactcca ttgcttcaa caacaaagt gatgaaaaac 180
actcaagccc cactaaacaa tactcgaggt ttgctgcga cagactggtt agactatttg 240
gacactacca tgaagactat atccaccatt ctgcctcaa aggaggagac tgcagagaga 300
aaaggggaag aggaacagga ggaaaaagg ggaggggagg aagtggagga ggggaanaan 360
gncntntnnn angaaganat ntnntttat tgccatanaa atgaengnnn gaatccatt 420
tttctg 427
```

<210> 889

<211> 572
<212> DNA
<213> Homo sapiens

<400> 889

```
attaccgtg aagatgctga catgtgtag aaacagaaaa tccagctcat gtggtttaga 60
cggagacgtc tctcatagca ggaaattcca ggtgaggcca gcaggatttt ggtgaattgc 120
ctggttggtc caccaaggac tctgtctctt ctcatcttcc caggcggcca ccccagggtg 180
aagatgctct tccggccacc ttctcttata agtgcaaagg gctgcggagc accaggcatt 240
gcatccagac agggaatgca acattcacca gggaaaaagg agcatttctt ctttatgttc 300
ctgtaggagt gagaaaacct ttgccagaca acccccagca ggcttctgt tgggactcat 360
tgacttgagc ttgttgaag ccaattgttg gaaagagaaa tggagtacc aagattttct 420
caagagacag agtttacct tagccacaca aagtggatac ctgaaccagc aaggatagag 480
agggcattgc tgctgcattg tcaaccaaca gtattcaca cagaatgaaa aacaattcac 540
attactact gaataaagca gacactcctg ac 572
```

<210> 890
<211> 622
<212> DNA
<213> Homo sapiens

<400> 890

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acaaagacag tcacagagt aacatgttt ctgaggctcat accactaaaa gtggaaaaac 60
gattattga accaggcac tctggcacat gctttatgag attcatttct tgcaccctc 120
agtaaggaa agacactacc attcaaatac acaagctaca taagacagac tacgtataca 180
ctggaatcag agtctccaat cagaaaggga tttgtgtct ctttctctgt taagaacctg 240
gtttagacag ctctgtacc tataaacatt tgctctaate aattagagaa ggagagccta 300
agaaatggtc atgcaaaata ttcggacaat gtcacatgat gcctgaagac tgctctcatt 360
ttaactggga taaagaggac atttcccat tcaagagctg cttctgattg nictatgttt 420
ctgatgcatt ttactgacg caatacatag ggtaataaga tactcatgtt acagacacat 480
tatgtaataa gtctgnatcg gttatacctt tatttggtt cangaaaac aaggtttatt 540
tttactctg ngaacaatg ncatttcaac ttatttatac atattcctt atcaaggaaa 600
taattttatc ctggatatcc cc 622
```

<210> 891
<211> 235
<212> DNA
<213> Homo sapiens

<400> 891

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gcctcccctt aaaatgcat ctggaggaa tggatggcc tgaaccccag cccgagtcgt 60
cttcacagc gccatcctgc ttgttttct tccagcacg taccttgga atgatccgat 120
tttactacta ctgtctggc ccccttgaat ggtggccca gagagacaag gcctccttca 180
cagcggatgc tcagaattta actaaatgat ttaacganta aatttagta aaact 235
```

<210> 892
<211> 231

<212> DNA

<213> Homo sapiens

<400> 892

```
caagactgcc ttctggccc tcgttccttc ttctgtctg ggactctagt gaacatcatc    60
tacgaaaggt tctgatcaga aaaggcattt tcagagctga cactggctgt tgaaagaaaa    120
gaataaaaag cttgagactt tcagcatcct ggagaaagaa tatgcttcat ctacgcacct    180
cacacatatt tgacttgaaa tcagattaat aatatataa cttccacaag c                231
```

<210> 893

<211> 213

<212> DNA

<213> Homo sapiens

<400> 893

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atccagtaaa gactgcgcgt ctgacacctt taaaagtctc aaaaggaaac atttaccatc    60
tgtttttct gagggagggt tcatttatat aacaagaaga ccacctttgc tagccaagcc    120
acctttttc ccccttccca caaactgttt taccagaatc caagccccca ttctttctgt    180
aacctctaaa tggtatataa atttctgtaa ctc                213
```

<210> 894

<211> 138

<212> DNA

<213> Homo sapiens

<400> 894

```
gacgttctct gcaggcgaat agtttctgca ttacaggatc ttctgcaaag gcccatcaac    60
tcgtcaatgg acagcaccaa cagtttgac tctaaaattt ttgaatgcc tctcattaaa    120
atcctcctct tgctgctt                138
```

<210> 895

<211> 219

<212> DNA

<213> Homo sapiens

<400> 895

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gtttatgcta caagttactc cagttctaaa ctgaatggaa aatggaacca ggtgatgtat    60
ccatgtgaaa agagaccac cactggggat gactgagcta gtgaaacgct gctgcagaat    120
gaggtacggc tgagacagcg gtgaaccatg gacaggaggg aggtacacgt gaatagacgt    180
ttatgtgttt tatgtaaaa taaaatgtat aatgattgc                219
```

<210> 896

<211> 453

<212> DNA

<213> Homo sapiens

<400> 896

ttctcttgta gctagtatgc caaaactttt aagagaccat gtgcaaccct ccagagccct 60
 attgttggc tacaaggacc tgggaagccac atgtggagat ggtggaatca caggctaaag 120
 agtagtcttc attggaagtc acctttgaaa acagaacgtc acttttgtt agcactgcaa 180
 tactcttcac cactctccac ttgggttctc cctgttttgc aactgttaag aaaatgaatt 240
 aaccaattaa ttagccccct gtggctgagt tcttaaactc tagaaggggt acagagagat 300
 cctacctacc ctatggatgg cagaaatggc agctgacatg agtttcaact cctcatttat 360
 aaaatagagg atactaacag gcccatcttc aaaggctgtt gtaaagatta aatgagttaa 420
 tatatgcaaa taaactggaa cagtgcccat gac 453

<210> 897

<211> 184

<212> DNA

<213> Homo sapiens

<400> 897

ggttgcggga gcctacgaag gagaggggct gaggcctata aaaacttggg cacataatct 60
 gtctaatac tttgaagatg aaaagttgct gtgaaatgcc aaccgagctg atgggaccag 120
 ggctggagca gagatgaaga gacacagcag ggccaattgt gcaaaaataa aatgcatatt 180
 ttt 184

<210> 898

<211> 90

<212> DNA

<213> Homo sapiens

<400> 898

caaaactcca gtctgtcatc acctctgaca tgcgccaaga gctaccagga atgatgaagt 60
 atatttcaaa taaactttcc tattaagag 90

<210> 899

<211> 452

<212> DNA

<213> Homo sapiens

<400> 899

agaccacgt attgaggac tgaagtttca gcagcacatg ggtgaccttc gaaatggatc 60
 ctccatcacc ttcagatgac tgcagccctg gatcacaact tcaccacaac cttgagagt 120
 accctcacct tgaacctccc agccaagctg ttctcagaag gccagctaac ttcaaaaatt 180
 acccaaggat tcatcatatc aaggggcaaa tggcttctg tttctctctg tgcctctca 240
 gggcattagt gtctggccct ctctcaaggt acctgaatgc tgggagcctg aatctgacaa 300
 tgccatttgc acctcacaaa tcagcttgag acaatgctta catatgttcc cctgcttca 360
 tatgtctcgg ttatacttga gtgacgtca tatacttta ccccatittg tatctctcag 420
 ttatactga ataacgtca tatactttc cc 452

<210> 900

<211> 636

<212> DNA

<213> Homo sapiens

<400> 900

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gaatggaaac tagggctcag aggtttcact tgccagaagt cactcgggcc ctgggaagga    60
tgcaaacag ctcacctggc tctccagcac atgcaccca gaccacccc aaggatgtga    120
cccattcctt ctgtggagtc tgatctcca aacttagac aacagctcct tctgcaagct    180
ttcgagcctg caagctaagg acatgaatga actgagtcac cccacagag cttcattaat    240
ttaaaggcaa ttaagattt ctgagtcata ggtttcagtc atttagattt tcccagctgg    300
tactgtactt gcccacacac acttttctt aaagattgca tctgtctaga tgtgtggttc    360
tgcccacctt tctcagttt ctgagaagaa actcgccctc gtggagtgtc acatgcaggg    420
ctaagccatt tccatttggc acgtgcatta gagtcttgc ctgagggatt aatgggatta    480
gcagtctgca gcttgatcta gactctatcc accagagaca tgcacaattc caaattctat    540
atccaacaca atattttacc cagtcttccc agaaaattca gttatgcat atgngnactc    600
cactcctgaa taatatttaa gcaactgat gaacaa                                636
```

<210> 901

<211> 477

<212> DNA

<213> Homo sapiens

<400> 901

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agcagtagga ctcaacgctg aaagagaaga ggcgggaagc taagaacaca aagagaagcc    60
atgcagggat tcacaaaaac agcaggcagc cagtgttgct gatggaatgt tggaggaagc    120
tgtctgttc agcaatacag gaaaaatgac tgcagtgaaa gaaaatggaa caagtgcata    180
cattgacaag aaagatatgg attcctatac acaaagactt ccccttgcca gatggcaggg    240
gtggcatttg cagatgatgg gcagaggggc tggccctccc acattaggtc agattggcta    300
acagtcattc cctggcagga aggttcccaa cctgggtgac attgcacat catccgtgaa    360
agatcattt attttaaatt cagattcttg gttacacct agcctacat aataggatc    420
tctggggatt atactctgcc atttcacaaa tattaaatgc cattatgctg ccttttg    477
```

<210> 902

<211> 294

<212> DNA

<213> Homo sapiens

<400> 902

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aagacaatgg gatggatatt tggatcagag tatgagttgt ggatgaagag ggaaaatttc    60
tctactggc actgtgatga ctagtcaaaa cctacgctat ctacaatgcc ttcctgtct    120
tgcggctcat tctttctgaa gccagaacac ttagagtggg tggggatagt agggagaacc    180
accatgtgc aatagcaaac cagctccaga gaagggtctt caaggggtgc taataatact    240
ttctgacaat gaattctcac tgtgggggata taaattatat gcatcctaaa ctg      294
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<210> 903

<211> 433

<212> DNA

<213> Homo sapiens

<400> 903

gacattccta cattgattgt caaggtgttg aaatttccac catgtagttt ttctccaca 60
ctcacagaga ggctcacggt aaacctccta gagcatctta ttaaaagaga aacgctacag 120
ccatagtac agatgagctc tggtagtaaa aatcccacct accactactt gactgttgcg 180
gtccctgaag cctacaaaat cgcagaatga ttgctgggtc tcaaacctct aggttacttt 240
atgattggga attttacata tatccattgc ctgaaatgcc ctagcatct attacccttt 300
gagacttagc ttcaatatca agtaatgaag cttttcttaa gtacctagag aaaatcagtt 360
ttcgggtctc tcattgtacc ttgtacgca cagctttctg ttgtacctt ttcaaatcaa 420
tcatttcacc att 433

<210> 904

<211> 437

<212> DNA

<213> Homo sapiens

<400> 904

gtctcagctg tgatgtctct eggaggtgg ctctgttgg cttcaatgc aattttctc 60
ctgtcttggg ctgtggcccc caaagggtg tgccaagga gaagcagtg tccaatgcca 120
ggggtgcagg cagtggcagc tactgcatg attgtgggtc tgctgattt cccaatcgge 180
ctgctctccc cattcatcaa ggaagtgtgc gaagcctct ccatgtatta tggtaggaag 240
tgccggctgg gttgggggta catgactgct atcctcaatg cagtctggc cagcctctg 300
cccatcatca gctggcccca cacaaccaag gtccaaggga ggaccatcat ctctccagt 360
gccaccgaga gaatcatctt tgtgccagaa atgaacaaat aaaaatctcc tgggagtagc 420
acaaagggca caagtgga 437

<210> 905

<211> 237

<212> DNA

<213> Homo sapiens

<400> 905

caagcaagaa gatattctgag aagcctgaga cccatgccac agttccccc aaggagcaag 60
ggaatgctgg aagtactga aggagaggaa agcatgtaga atccctggat ccaaggcaaa 120
ggaagaaagc actagaattc aacttgggtc tgcaaaaatg aaccacagga agacctagac 180
aggctttggc atcgtatca tgtaacctt tgctactcat aaacaacaat tcacaag 237

<210> 906

<211> 633

<212> DNA

<213> Homo sapiens

<400> 906

gcacactgga ccttccgga aagatcgag gaagcgagtc agagccgagt cttttcgtt 60
ggagcttaca ttctaggcaa ataaggtcat ttccgccagt gatcagtttt catgacaaag 120
aacatacaac tgtgatgcag tggactgaca gaaggaccag ggaaatgggg ctgctctttg 180
ggatgcgaat ggtgacatct tcaggagaca acatctggtc tgagactga ttgaaaagaa 240
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aaggcccaaa ggcagcaaga gctcctgtga tcaagaaaca gagagaaggc cagtgtggcc 360
 ggggcatgtg gaggcgtggc tgagcctgc aggcaacagc gagccagaag tcgggctttt 420
 attctgagtg cagtgggaagc cccttggggg ttctcagcag gacaggcagt ggcatgaaag 480
 cagaactgag agagctgggg ttacctccac tgggtttatt ctcttccac attctctgga 540
 agacactcca ctctcttct ttaaaactgn aatnccctt ggttgacttt aataaccanc 600
 caagaacatt ttctcagctg gttaaatttt ttt 633

<210> 907

<211> 647

<212> DNA

<213> Homo sapiens

<400> 907

attatatctt ggccaagcac agagattccc tgaagggtcc gctcaagaag caggaggtgg 60
 attcagcccc acagcttccc aaagtggacc tactgacggt gcctgcagtc gacacgcaga 120
 tggagacgcg gcccatgacc ctggaggaga tggagggaagt gggcaagcgg taccgcgagc 180
 ggcagcgaca gcacaagtc acgatccctt ccatccagta cacggagcaa tgcacctgg 240
 tgcgctgtgg gaatcgccac ttgatgagc actgcctccc gtccaccatc cacggggata 300
 tgagggagct cattgactcg gccgcaggc acaactttct ggtctacctg caatgctgga 360
 agctctgtaa gtcctatggc ctcccgctga cagaggacat cctcatgaaa gccttgctgt 420
 acccaggaga cgagatcatt ttccagatgg acaaagtgtg ccccatccgg cagccgggag 480
 gtactactc tgactggaag gtctttctc cgaatctggc tcttgctccg gtcccanggc 540
 ccctggaaaa cgcccaaaga aaagcaagaa aatgcgcttt taaggagtgt aggaatttac 600
 cangaagctt gaanggggga anggncccag ggcttgaagc aaacaca 647

<210> 908

<211> 298

<212> DNA

<213> Homo sapiens

<400> 908

attattgaca agcaccgtgg gctcaatggt gtcaagtgt acttggtgt tcaacacccc 60
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 tgcccgcttg agtgatggag agatgagtat cagtctatac ctcaactgct tcaagcccgc 180
 ctgggcttcc tccctggcgc cttgtctgt gtcagggttg gagcaacgaa actgaaagat 240
 ctccagagtt tgaaaacaga gtgaaagagc aaatttaata aatgagagct cagcctcg 298

<210> 909

<211> 197

<212> DNA

<213> Homo sapiens

<400> 909

gntggctgga aatattcana atgagagccc acaattcanc tctcagtccc gagggacttc 60
 cttgnctgat gtactgtnga gcagcagnac tatctgttc tgctanaact atcaaaagta 120
 tatgaaaatc tctttgaaa actcagaatg taagaaacat cactgaaatc ttcaattata 180
 aatcttttgg gaagctg 197

<210> 910
 <211> 645
 <212> DNA
 <213> Homo sapiens

<400> 910

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atgggacctt cacaatatat tcattgttca gctggaaacc ctgggaagca gtaatctgag    60
ctccttgtec tgaggccact tggaggccat ctccatccaa tgtgtgtgt ggacccaac    120
agagggctga gcagctgtcc gtccttgact ctgggagaaa ggcgttatca tcaagatttc    180
cataagtgga cagaagacac actgaccatg aaaggaaggc cagcactggg tgatcattt    240
cattctaaat ggaatctcat caaataagca aagaagatta agcgagaga aaagacaatg    300
ctgtcaccat gcccatgcc aacacttttc atctattctt ctgagactag ctctgagaag    360
ttacctggga gattttacct atgtaagaag acaacctttg ctactgngg agttctgtcc    420
ctcacttttc tgcaatttgg tggaacatcc ttcagagatc aaaaaaactt tgttctaaga    480
cattggctgg tcttgggact cattcaatct cctgaaagn cacttactac cccttaaaat    540
tacctacatt tctcatttct ctcttccta tgaaaaagt atttaagctt caaccccctt    600
gcccttntt tgagtttcat attttgatg ggtccggaaa cactt                    645
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<210> 911
 <211> 639
 <212> DNA
 <213> Homo sapiens

<400> 911

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atggcactgg ctgaggcaga atgaatacag ctgctgattc tgatctcaca ctgggtatat    60
ccctgagtgc tggaaaaaac atcacctca gaagtgtgca ttacgccagc tgcctttgga    120
gagagccggg aagggtgcaa agtggcatgt cctttaccag tcactcttcc tgggccaatg    180
cttatccaga aatgagacag aactatgggt ttactgcaaa tgaccagcat ccgcaaagtg    240
atcaagacta ccaactttgg tgttactct gcaatgaaaa aatgaaccag cagaagggtg    300
atgtgaaaga ctaagaagag ccctgcagaa aaccggttag cccatgtttt catctgtaat    360
gtggatgtgg gatgggaaga gggacaacga catagtaccg accaggttcc agaaactatt    420
ccaagtgtt tacgtgataa aaatctctta attgtctcaa cgaccatacg aagtatatcc    480
ctagtgtgct ccctatttta tagatgacaa aaccttactg atatctgtgt aactagtaaa    540
gtaggagaga caggattcaa tctgtcagcc cactntgcc ggtggccgng tccctgttt    600
tgggatcctg acaggcagnc cccanccagg aaccccgtc                    639
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<210> 912
 <211> 629
 <212> DNA
 <213> Homo sapiens

<400> 912

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gtctttaga aatttgctg atgcaccccc tagatgtggt gaaaaccagg ttcagattc    60
agagatgtgc aaccgatcca aacagttata aaagcttggt agacagcttt cgaatgatt    120
tccaaatgga aggaaccaca gcatgtgggt aagaaacttg gatctgacag cagaagaaga    180
aagaggatat tgtatgcctt caatcagctt tgtattagga gagccttaaa ggaaaaattt    240
tgtgaaaaaa gaaagaggaa gaaaacaaca aactagcaag atctgtattt cagtataatt    300
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tggagaaaat gactgatttg ggttggtcat gttgccagaa cagatgactc aaggcttcca 360
 tacaagaaat ggaaatcagg aggatgcctg aagcctgaaa gaagaacaaa ttgtaaagat 420
 atgattgact gtaaggcttc aaaatcaact gtaccaaaga tgagcttgaa tcattgccca 480
 gaacagagct gaatggggat gtccattgg gttctggctg ntgaacaaa ataaaatgta 540
 gtaattgnaa aaaaaagaaa aaaaaaggc cagcgaggcc aattcanctt ggcttaacca 600
 ggctgacttg ctcaaaaggg gggggggggg 629

<210> 913
 <211> 644
 <212> DNA
 <213> Homo sapiens

<400> 913

aaaataggaa actttccaaa ggaaaacaac aacaacaaca acaacaacaa caacaacaac 60
 agacaccag tgagctttaa gtgcctctga gaaggtagag ttgaagaggg agcaaacaaa 120
 attaagagat caaccctgca atccagaaac tcagctgatg gccagtgtta catagagcca 180
 agatttaagt gccacttgc ttctcttcca gtaacaaga cagataacca actcatgagt 240
 tgtctcattt tgcatttcta ccagcaatgt gactactctc ccctaccttc atcaacacaa 300
 gccatgcagc caccgcagca ggtgatgcct ggattctgct gcatccaggc tgcagatgcc 360
 tgatacctga caccctcgga actgacgtct gactgagag cacatctccc aactgcagag 420
 cccaggtgat ggtgctgctg ccagcagaag tgctgatggg ccaagctcct acaaagcttt 480
 cttggtcttc tggagccttc agtgtgtga agccacacca aagcagaang cgctttctca 540
 ttagtggaat agtatggtaa ttggacacca aagctatacc ataaaatcat caacactgna 600
 taattggtgc tattgaaaat gcttatgggt cattattaaa catg 644

<210> 914
 <211> 634
 <212> DNA
 <213> Homo sapiens

<400> 914

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 cccaaagccg gcaatcctat gtatctcctt tcttgctggc ctatcatagg acaggtgtgt 120
 ttcttacaga tacaacaaag cttaaagca cgaaaaagat gaactcgaac caccagtgc 180
 tggaggaacc atgacaacac aaacaagaag gaaacaagaa agaaaaagca taatcctggt 240
 ttttgtgttc tgaattgtgg atttgaaatg gaggctcccc tgctgctga cagcctgcct 300
 tgatgctgct gatgtctggg tgatgaacag tcatggggtt cctccacct gcctctgtgg 360
 attaataag agcaaggcag gaatggcaga cctgccatct ggaatgacct tacctgataa 420
 gattgtctg ccttccccgc caaagggtgag gagggcttc aggatgcagg agactgtttt 480
 cccacacct taatgagaaa aattgacctg ttattcacc agctgncttc ttgtttcta 540
 atccaagcaa ttgctgcaaa atcgnnttca ctctttcat ggtgaaattt gagcagaaag 600
 cccctcgag tggcttatct ttgcagacaa ccaa 634

<210> 915
 <211> 553
 <212> DNA
 <213> Homo sapiens

<400> 915

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gacaagcgcg accaccaca catgacggta ctgtgagggg ccagtagtac gaatgaatcc 60
caactgggcg gccctgcttc cctgcctcaa cccagggctg tgtgcttccc agcaggcact 120
gccatctatc cagccccaca gtttcccagc actcagcact tctgatgctt ggcctcaacc 180
tcgccaccac tggagaagat gaaggtgcat tctggtggct tccacaggta tgacactgtt 240
tcttgggacc tgaagagaat gcaactgtcta caacctgagc tacaacctg cagccacatg 300
ctgaataaag tgcttcaact cacagctcaa aagcccatgg ccagagtgtc ctggggactc 360
ctgtacaat tttgtttt cactcacaag tacaattaag gaaataatct ttgggttta 420
agtgtaaata ctaaaatctg cctgataag gtccttcccc ttgcatgcaa tctattata 480
ttctgttagc aggcaaggaa ctctctatgg ntaatctgct tgatttgggg gggagagtgt 540
aatctttaa aag 553
```

<210> 916

<211> 167

<212> DNA

<213> Homo sapiens

<400> 916

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gaaatggtac ttttgatca catgtgaagg tttaaaaaaa tacagctgcc ctggcttct 60
gaaatctgga aagctttaca gcatgaaaga agaatggtt cattggataa taatccatc 120
gcaataagag caaagtccat actactatta aatgtgtta tccactg 167
```

<210> 917

<211> 184

<212> DNA

<213> Homo sapiens

<400> 917

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ttacaccacg cctctgagt atgacagcaa cctccttca gggattaaag aaaatgcttc 60
agaagattgg aacactgtc agccttccca accttcttt accactgatg ttctacctt 120
agtgatcttc ctcttattt taatgcttct ttctctttac aattaaaagt tcataaaatc 180
ttc 184
```

<210> 918

<211> 441

<212> DNA

<213> Homo sapiens

<400> 918

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taccctggaa gtgctcagta catcatatga accagagtgc tggccaggaa tgagaccacg 60
cttgcctgt tggtcaccgc atctccaggg aactcagagg catctccagg aaacacctga 120
atatgtgagc tggttcctta caacagtcca atgaagcana ggngtgagca gatcctttt 180
acagctaang aaactgaggc acaagaggt tgacagcaca ctgccccaa agcgagatc 240
tgaaatccag gcagcgctca ctccacttgg catctgctgc agtggtctaa aggetgggtc 300
tggagtcac tgaaaggcct ttcaactnt tgtgtctggg anggcaattg gcccttgcca 360
gctnggactt ttccacgtgg ctccatgggt gcctcacaac atggncctgg gtcccaagaa 420
gacgagatag aacatttta g 441
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<210> 919
 <211> 325
 <212> DNA
 <213> Homo sapiens

<400> 919
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 catgtagcaa ggacataagg gtggctgggtg gccagacag aaaggagctg aggtctcgg 120
 cccaacagcc tgaagaagaac tgaagtaca cccacaatga catgactttg gaagcagatc 180
 cctgagtctt cagatgagac ctgagaactg gccaacacct tgattgaagc cctaatgaga 240
 gaccctgaag tagagggccc tcctaagcca tgcctggatc cgtgactcat aggaactgtg 300
 aggtaataaa tgtgtgctgg ttgct 325

<210> 920
 <211> 508
 <212> DNA
 <213> Homo sapiens

<400> 920
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 ctgggaagat taagcatctg tcatacctac ctcccctca gaggtttggc accaattgg 120
 acaatgaatg agaaaagggg agagatggat atgccgaggt acattcatgg caaatgaaga 180
 ttcaataacc tcacatcagt gagcattaac attgatttca caggggggtg tactcagaaa 240
 ggtgggcagc aatgcagagt catcatgaag tacctagcag taaaactgta ctgcactcaa 300
 agaaccaaca tcactgcagc cagtacccca ttgcattaca agcagtact gcatttcagc 360
 aaaataacaa catacatcat attcaattaa gtgtggnaaa ttgtatttt tatttgggtt 420
 actgaattta aatctcatct gcaaaacaat ttaattggnt nttngaaag gaaggggntt 480
 atataaagtt tatgttgga atcctaaa 508

<210> 921
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 921
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 tggacatcaa ggtcgcagcc agccttcagc aagatctgga ccacaggaag atggccctta 120
 ttggcagcaa gatgcagggg agtccggcca tgctgtgaat gcaaaatgaa caatgattc 180
 ggaacaagtc ctcaatgcta ctcccttggg agacagaggg cctagagcaa ggtttgcaca 240
 ggggctttcg gatgatcact cctcctgcc cctttggatt ggcaggagat tcttatgggt 300
 taaccaaata tcaagtttgt ctgagtaac ctgggctatt gtcattgcaa tcaatgaaca 360
 cgatatgttc 370

<210> 922
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 922

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ctacagagaa taaacatatg tagtttacga ctatagccac attatatctc ttggaacat   60
cactggccaa gacaatgaag gaatagaaaa gacttacggg atagacaatt aatctagctg  120
aaaacacagt cagtctgagc aagggttctt gctcctaaaa ttagaaaaga actcctggac  180
tgggtgagga ggggtcaaagg cataacgtga gagctaagac gcaggttcat tcttgtagc  240
tgcattgccc ttaactctct agccttatcc ctggagagga gatggcgctt tcccagata  300
agggtttggg atcagagggg aaggtacttg tgcctcctgt gccaggcaga gttctgatga  360
ggcagcaaga ttccagaaga gaggactgta tggatcatcc agcaaaccag gccttaacag  420
cgtcattaca ttcccacgc tgcangggaa ggaaatttn acattncna aagggggcca  480
aacntancag agcacctnct aaatttatag aagga                               515
```

<210> 923

<211> 273

<212> DNA

<213> Homo sapiens

<400> 923

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tattctagga cangaagaag caggaagagc aaagaggaaa aatgaaaaga agcaatgcct   60
gtcaagatcc acaacttctc tcagaaatct ccaacagact tctacatatg tctcattgac  120
caaaaatata tcatatgttc atccctagct gctcatggcc ctttgaataa aaccaaggat  180
ctattgacaa agactgggag agtagatatt tgcaatatta gcagtgtcta ccacaccaac  240
ttccagtcac tcaactaagg tctttctgc cat                               273
```

<210> 924

<211> 521

<212> DNA

<213> Homo sapiens

<400> 924

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gggtgcagatc tgcgtagtga aactaccac agcaaggatg tatgcctgtg aggtggcaca   60
gaactgatgg atcagacttg gccttcaacc tctgttatc ctgatgaaat tgcaagctcc  120
aaacaacaga gacacaacat tgaccaacag taagatggct tgaagaaata ttctttcag  180
gacaaactct gtgcattcca tgagggtgga tggatggact tatgaggaca aagccactga  240
catcatgagc aggaacaat gcttctctca agctgcagct tcgaaatgtc aaacagcctc  300
ttccttgggt gacaactgct ttctgactca aaggaagacc ttgcttcca gcatcagggg  360
ctgtcagaaa ctttgctttt gagtaagtac aacatcacac tgcctggagg atctaggtcc  420
acctttacac agaagcacag agctnncnaa gaaaaggggt tnnnggaag ggaaaatttc  480
aaatnggtt ggactttatg gggtntaaa ggacaaaagg a                               521
```

<210> 925

<211> 512

<212> DNA

<213> Homo sapiens

<400> 925

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atacaagtgg atcctctaag aaacttggga gccttgtggg ctggtggaga actctcaaga   60
tggcaccagc ctgtctatgg tctatgtggg aatcaccgcc atccttgcca ttcatgcag  120
```

tgtaccatgt gatgggctgc attacttagt gacaatgcta ccttctcact cettgcacag 180
aggagagaca gacacctgct tgtccaggc cctgcctgag ctgaggctct gccacaggga 240
tgaagagggt ggagaatgt tctgccaat gccacaacg cctcctcaag gacgattcat 300
ggaggctgt agcctgtgct caattccct tggcaaaact gcaacaaagg catggcagca 360
gtttgatgt cacagagagg agtgaatata aagcatggct ttaggcagac ttcctttaa 420
catgcacagg ctctgctgn tgncttatgc ctttggngg aatnggaaat tcnaaaggg 480
gnggtnttc cctgcctgt acaaagtta tt 512

<210> 926

<211> 440

<212> DNA

<213> Homo sapiens

<400> 926

attatagta aatgattac attgacaagc tgttctacat ccacctccc cgttccagc 60
gtggagcct gaggcacgt tcaaaaaagg acaaacagcc tgagaggcag ataatggat 120
ggcctggtgt aattttaa ccatgaatg atgtgtctt tctctctcc cctggagaac 180
ctcttccat gtctgactga cgataatgt tgaaatttt ctacttagc agggagaatt 240
agttgtttt agtatccaga acacagcact gtatttggt actagctaag tccaatttt 300
aatatattac catgcataaa catggnggga ggtcaaaaag gccncnctt tgggcaagat 360
tttataaaa taagctgagg ctcaattcat ttttcaaaa acgtggagg ccctgcctt 420
tgccaagccc aagatcctt 440

<210> 927

<211> 530

<212> DNA

<213> Homo sapiens

<400> 927

gatacaagca cctgaagac agagattata tcttgaccc ctacagcatt taccacagt 60
ctctggatac taagggtgt taatggaat tgatgatgg ggtgtgtgaa gtgacttcta 120
cctgcgtgga gacatctcta atggctgcag atgaagtct gcctccctgg ctatttcca 180
ccactgtaga gaatggccac agttcacctg gaatgtctt ttctaactg gctagtctca 240
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ttcacaccag tgattcggt ggggtgttga ctctctgtc ttaccacta ggtggttct 360
gtctgcacac aggagagctg aatcgccag aaccncaaa aatcccagcc tcaccaagag 420
atgacacgtg acctggnggg gntcaccca aggcataccc ctttcaagt tagnaanaa 480
aaaaacntg gtcacagggg tttatagtg gttatgggc gtcacaaac 530

<210> 928

<211> 530

<212> DNA

<213> Homo sapiens

<400> 928

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aggacataca cctacacaca gtgccaaact catcctgtgg ccaacagatg tacagagaat 180
 ccagagtgc ttattaagg atgggtgact gttcatagtt ggcatagttg gtttctaaa 240
 cctgggaagc tcagcaaacc agttttacaa aaacatcaat agatgatgat ggtggtgatg 300
 atcttgataa cagtgttaat gattatatca gaaactagta cttctgaggg ttacaaggt 360
 ggcaggcact gaggcaacat cttctatac cttctctcat gtgattcttc caagcatccc 420
 atcagaagct ggccaanggg ggtcatgtct gtnatncac acntttggag gccaaaacaa 480
 aaggatcgnt tgaagtcagg agtttganac cagcctggca acacagaata 530

<210> 929

<211> 518

<212> DNA

<213> Homo sapiens

<400> 929

actggagata tctaagtttt cataagagat catcagaaga aaatgaagat ccaggctctc 60
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 acaaagacag atacacaagg agaccatgat gaggcagaag caagagatca cagtgatgct 180
 tctatgagcc aagaaaatct aagaactgcc agccatcacc agaagctaaa agagaagcct 240
 gaaacaaatt ctgcctcaga gcctccagga ggaatcatcc cgggagacat cttgatata 300
 gatttcagc ctcaaaaact gtgaggcaac aaataatctg tcattttaag ccaccagttt 360
 gtagtcaact gttccagcag ccctaggaag ctaacacaca gtcagcctcc atttttgat 420
 gnttgaccac acacanggtt gaacctncc gnntncggct tcttcttatt ttgacnnggg 480
 aaagngata accatgtggn ggggctccct ccttggggg 518

<210> 930

<211> 495

<212> DNA

<213> Homo sapiens

<400> 930

atcgcttctt gacctgcaca actttctgat ttgatgagtt caacagaaac caactcaagg 60
 tagcagatcc agaaatgatt agaacactta ggataatgaa ttattacatt ttcaaggcac 120
 atcagtgaat gttatgaaga gggagaagaa taaagacatt gttgaactta gactttgaca 180
 agatgcatat tggatatcta aatagagata tcaagaaatg aagatatgca ttccagttc 240
 cagagagaaa ttcacactgg aaatataaat ttaggaattt taaagttagt ggtcacattt 300
 aaagctgcag aatacaaaga gatcacctgt gtgagagaac tgagtctga aacatacccg 360
 tgtttaaaga tctgggaggn gcagaggaat ttcaaaggag gctgagaagg ancancngtg 420
 aggnnggtga aaaccagata gcnaaagaaa gcngaatttg gactgacttc cttgnaaaa 480
 attaaaaatg taagg 495

<210> 931

<211> 410

<212> DNA

<213> Homo sapiens

<400> 931

cagactgagg acctggatat ctttgctggt tcctgaaact ctgcagacag tcctaaggga 60

tccagngggt cctctgatgg nccccaatgc tggagtcac ccatatagnt ctgaaaagtt 120
 gtcacanaa atggccgttt ntggaggatg cncaggaaac tttcatttg gcatgaaaaa 180
 ggctnttggg ttgcaaaga ctgcagaag gaagaagttt aaattntga gccctcaaaa 240
 cagatttta gaaaagtgc ttccaacctt tgttngtcc aaataaagga agattngac 300
 ccncnaaaaa aatgtanaan aattaanant aaaatttng gggggngggg ggggggcctt 360
 tttttgtgn ntntntnccc gngngtttt tttttaag gggggggggc 410

<210> 932
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 932

cctatggaag taattatgga ttaactttgc ctgatatttc caatgaattc tccatagcat 60
 caagcacaaa tgatgatctc ctaggacagt ggcagcttct gagaatgcac aggaaagtga 120
 ccagggaag aatgattcca tctccaggaa tccttggtga tcttcagagc ccagacagga 180
 ccttctggg ccatggtaac tgagaaactg agaagcagat acagtggtec ctatgttggc 240
 aacctcagct gaagaggaac aactctctct ataatcaagg acttctgaaa ccagaaatta 300
 ccagcgtggg gagagaacat taaaggcaga ggtgtctctt ataagcaca cgtgtgacca 360
 ggtaatactg tctggattag cagctgtaca gcctaactaa gccctggagc tacaattatc 420
 tggtcgcatt aaactgaaat cacctgaaaa acttncactg aacaaaccct ttggaaagtg 480
 ttnaatggen cnttaccctt caaaagggaa 510

<210> 933
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 933

cttcgctggg tggaggana aacttcttn cggntttcc agtgggggat cgaacgggta 60
 tcgaataagc tttgatgaa gcccgccaca tgggantcgg ccccttgaa caaagaatgg 120
 aattgcaccg caaagttctc ccggcccgct ttgggggtgg agangnctat tccgggctat 180
 gaactgggac acaacangac aaatcggctt gcttctgatg cccgcccgtg gttcccgggc 240
 ttgtcaacgc aaaggggcgc cccgggttct ttttgtcaa agaaccgaa cttgtccc 300
 gttgcccctt gaaatggaaa ctgcaagga acgaaggcaa gccgcccggc ttatcngtgg 360
 gcttggccca cngaacgggg gccgtttnct ttgcgccanc ttgtgcctc cgacggttg 420
 tccaacttgg aaagccgggg aaaaggggaa ctggggcctt gnntatttgg ggccgaaann 480
 ngcccngggg gcaaggaatt cttncttggc cattctttaa ccttggctt ncttggncgg 540
 aagaaaaagn aatccaatn caatnggctt gaanggccaa naggcngggg ggcttggant 600
 aaccctttna nnaccgggtt aaaactcgtg g 631

<210> 934
 <211> 503
 <212> DNA
 <213> Homo sapiens

<400> 934

ctgagggtcat ttgactgaag gccacacaaa cagttgtctc aagtgtgaaa agagatcact 60
 atattttgta caaatgaaga aactgagtta aagaagatt aaatgtcctg aacgatacca 120
 ataactaatg actgatgggg tgggtgggtc ttcttattg catgaatcct taaaaacaga 180
 aaattgttcc tgggcgtagt cacagatcga tgtgaagata gaagacagca ccagaatcaa 240
 tgaactctgc aaagatcctg gactcctct cctgctgcat aataaaggaa gtgaaattct 300
 gcttcacga tgaataacag gattttatat aaaacttga atgacatagg agggacaatt 360
 tgcataaac aacaagtcct caaactggcc acaagctgtc tgcactgttn tttgaggat 420
 ttccaaatg ccanaangng cactaacagc tntagatact tgagtcnaca anaaacctnt 480
 gnncttttt ttttaagggt gtt 503

<210> 935
 <211> 155
 <212> DNA
 <213> Homo sapiens

<400> 935
 tggaccagag tgacctccca cctcaagga ctctgatca ctttacctg attgtctaca 60
 agggatgat ttacaaatcc tacatatga ccatctcaa gaggcctcat taagaaaagc 120
 ttctctgta ttaaatcaa agctgttttc attgt 155

<210> 936
 <211> 535
 <212> DNA
 <213> Homo sapiens

<400> 936
 gttttgtca agcaggaaag gatttgcgtt tggatcact gtgtatggaa caaattgaca 60
 tcccagcagg attcctcctg gtgggggcca agtctcccaa tctgcctgaa cacatcctag 120
 ttgtgctgt ggacaagcga ttctaccag atgatcatgg aaaaaatgca ctttagggt 180
 ttctggaaa ttgatcggc tgtggagaaa gaggatttcg atattcacg gaatttcca 240
 accacattaa ctgaagctc accactcagc caaagaagca gaagcactta aagtactacc 300
 tagtcagaag ctcccagggt gtactgtcta aaggacctct tatctgctgg aaagaatgta 360
 gaagccgaca atcctctgct tcttgccact ctattaagcc aagctctca gtgtcgtcaa 420
 ctgtgacccc agaaaatggg acaactaatg gntacnaatc agganttctn ttaaaggac 480
 ccccncttt gccnngggn gggnggttaa aaaaacaaat ttgttggggg gggtt 535

<210> 937
 <211> 488
 <212> DNA
 <213> Homo sapiens

<400> 937
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 atgctaagca gtggaatgga catcgacata gagagatcag ctccacactt atactctgcc 120
 actcaacttc cccatgtgac ttgaggatca ctctaactcc aaaacatagc aagctcgcgg 180
 aacatcaggg ttcatgcaaa gtattccaag gagcccttg aagcaacaga atggattgct 240
 cttctatggt ggaatggcac cctggatgat taaaaccgta gcagcaacaa aaacctccat 300

caagtaagaa ttacagagtgt gagatatcac gcacagccac gcgtggatct ttatatacgt 360
gtcaatgtgt ttgattgtat ttttgcttc aaagtatgta ttgagcattt ctctaggtc 420
ctcaagtaac atctttttt aaaaaaata aatgcttaag ggaattgnnt tatattaaac 480
tcgctttc 488

<210> 938
<211> 482
<212> DNA
<213> Homo sapiens

<400> 938

ggccattga tgaccacaaa aaggaatgct cagtgcagct gcgggtccac ttgagccctc 60
caagcaagca ctctcaagcc cgctctgtct gggagctctg tgtttcaga gcctgtgtt 120
gcagcgatgc ctggaatcct tgacacctgc acaccagctt cctgggcatt tccacaccct 180
ccccctccc acctcctgca tctccattt gcactgaaa tgcagctgct ctgggcccta 240
tagaggaaag ccaaatggac aggacatctc ctgtttgtt ctccctccc tgagtcaaac 300
cgaatctgaa gctcctctgt gcgagcctt tgttgcctcc tcattatgtt taaatgagcc 360
tcactgcag gaggattttt tttaataaaa ataaaaataa accaccacaa aaaaaaagg 420
ccagnnggc caatnagct tggacttaac caggcngaana ttttnaaaa agggggggggg 480
cc 482

<210> 939
<211> 525
<212> DNA
<213> Homo sapiens

<400> 939

caggaagccc tgaagatgcg gcaagctgtt ctctactttc ttgctgaatg agcaaatgct 60
ctaaagagaa gtaacagaag aaaaagatgg ttgtgccatt gaccaggtgc cgttctcgtt 120
gcccattcat ttctgcccg ccttgacac atctgcccc taggaagcct gctcctgaaa 180
caagtctcta cccgcaagaa gggctcatg aggtgccagc ctacgatct tggacttccc 240
agtctccaga actgcaaccc ttcttagcta aggttatgga ttggaacacc tacaagtgtt 300
tttccacgt ggacctgggc ttctcaaac atggtgtctg tgttccaaag atcagaaggg 360
ggtgactgaa gtagaagcga agtcagcaac ttatctcag gcataactac ttttctgta 420
tcctgaaccc tcgagagggg atttcttgaa gaaaagaaaa gaaaaaatt ccccttntt 480
ccctgggang nggaanaggg tgggaaaaaa aaaagggctt taaaa 525

<210> 940
<211> 160
<212> DNA
<213> Homo sapiens

<400> 940

gacatcaaac ttctgggtcc tcatgccttt agcctcagac tgaatgacac caccagcttt 60
cctgttctt cagcttatgg acagcaccgt cgtgggactc ctacgctcc agaattgtgt 120
aagaaaagtt ctcataataa acctctgctg gtatctctt 160

<210> 941
 <211> 122
 <212> DNA
 <213> Homo sapiens

<400> 941
 ggaaactgag accacatggt gaagaatctg ttggcgaaa gggctggaag attccggggc 60
 tgtgctgca atgagggata tacaacagtt ctccctatgc ctggaacaga gaacctctc 120
 tc 122

<210> 942
 <211> 304
 <212> DNA
 <213> Homo sapiens

<400> 942
 gatatgacat cttaggaaga agggactggg ggaaagaaag cactttctgc ttctgtggat 60
 ataaacacac agtgttttat tcctagtgc aacaaaaccc caagatcaac agacaagagc 120
 tgaaaaccct tcccaccag acacagtgcc atctaaatgt tctctcaaaa gatagcatct 180
 cataaacaat ttcaacaaaa ggatgtcagc ttttacttta tgtgcatgca caaatcact 240
 ttccaggaaa aaaaatgacc attaccgaat ccatcataaa attaattaca ttagttgat 300
 cacg 304

<210> 943
 <211> 155
 <212> DNA
 <213> Homo sapiens

<400> 943
 atggcagaga tggcaagcac aaagaaatga gattcacgct attccattg catggatgaa 60
 aatacagaca ctttctaagt gaagtagaaa ttctctgaca attaacaaga agagtttctg 120
 tgtccgagat atctaataaa tgttatttgc tcaag 155

<210> 944
 <211> 285
 <212> DNA
 <213> Homo sapiens

<400> 944
 gatcccagt acattttact gcaacaaaac caaactgtat gaagttaagc cctgtctcca 60
 ggaggcatga aaccacctcc acttctcgtg atgctggctt cttctcaaaa caatctcaaa 120
 gacagctccc cggatatttt gaaaattcag cttctgtttt tctgagaaaa atatattaat 180
 aacttctgaa ttctctgaca tgaataaat tgaacaagag tgtagcttt catctactgg 240
 gaaatattca aagctaagtc tactaaattg aataaaaacti ttaat 285

<210> 945
 <211> 442

<212> DNA

<213> Homo sapiens

<400> 945

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ctccattgct gactggcttt aatggaaaga gtatttttgg tctgtttt gaggtttggg    60
acagtaacaa gaaaagaagc aatttttaca tttaaatggg atgagaagtt caacacaaat   120
atctgtagca acaaggaaac atctcgaaaa attcttatta aaatttatac ttaccgttga   180
aactacagac atatgacaac tcaaaaataa acccaatttg gacgtggaat gtttcttca   240
agggtcaagc atcctgttct gggttcattt gatgaagcct atctacataa aattggaaga   300
ggcttgaaga tcttttgggt tcagtttctt catgtttaca gtagtaggag gctacagata   360
tctctaaaat acttctgttc taaaagactc tgcaatttta aatggggata tattttatcc   420
aaacatggta atgcctttgc ca                                         442
```

<210> 946

<211> 670

<212> DNA

<213> Homo sapiens

<400> 946

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tggggggggg aaggccttta ccccttggc ccattttaa agggttcaa gggaaaacct    60
tgggangggg taattaantt ttaaagttt cttttaacca ttgggaaaat tgggaccaag   120
gggaaaaagg gaaaaaancc aaaattggga aaaaattttg ggaaaagggg gaaaaagggg   180
gaaaaggaat gggaaaaccg gcctttaaag ggtgggtcca anggggccct cttggaagcc   240
cccaaagcc taaaaggccc cantccanta atccccctt ggtggaatcc ttggcaccct   300
taacaccatt cccaaggaat gggggccttg gaaagttaaa gtggaaaaga atcccccaa   360
aaaagaaagt ggaaaaaaat aagncnttt aaacctggat ngggcatttc cncctattt   420
gggggaattt ggttttttg ccttcaccct taactggaat cnaatggtan cttttggaaa   480
atctcccga ccttataaaa aangttctt ttgttaatt cttcccacc ctttgaanaa   540
tgtacnttt gggaanatcc accctntgcc cggcaaaaca attgntntt taactccacc   600
gctntccca aaaccttata agaagcta atantcccc ccccccttg ntggacctcc   660
tttttggga                                         670
```

<210> 947

<211> 315

<212> DNA

<213> Homo sapiens

<400> 947

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ctttaaact tctgaactta aaggaaacta ccaagaaaa ctaccaagaa aaagaagttg    60
aagatgttga agttgaagat gacctttctc ttacaaggt cttcataag aaataataag   120
tctaataaat ttaacgatgt gtgatcatat tctaaaatga aataacagtt tttagatttt   180
gaatgaata ggtaaaatgg agcaaatcac ttagagttc tgcattctga agaacacaac   240
caatctcctt acctgngng natcaaagat aatattctc aacngtatta aaccaattta   300
ttgccaggt ctgtc                                         315
```

<210> 948

<211> 495

<212> DNA

<213> Homo sapiens

<400> 948

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ctctcaacc gtctccctc tccccatta tggactgaag gttctgtcc ttccaaagt 60
cacaagatgg aaattttaac ccattgtga tgacattaga agataacgag atgatgatca 120
tactgtaaaa gccattcaa nganggtnaa aagnagcnac cctnnacncc ccaggaagan 180
cnnctggnac natcatcaac acagaagatg acttctgtgg ccaaattgtg gggagtttt 240
caccactcac caagcagcaa gacaccaage tgggtgtcct ccaattcact gtgacactgt 300
ctaccgggag atctgtcata tcgcacaggg tgaanactca attnccaaac tccccccac 360
cngagcaaat ccacactntg ggnatttng ccccncttt aaaatgggtt tttaaanccc 420
atnnggggtt ggtaattgg tggggccnct tcnaattta aggaaaccct ttctggttt 480
tttaaagggg gggggg 495
```

<210> 949

<211> 582

<212> DNA

<213> Homo sapiens

<400> 949

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naactgagct anggcnaagg gancctgnta cantggtgga ttgctccgaa caggagcngc 60
ctgttcgggc cgagctccgg tccctccga gagcggnttg caaatttct ctaatgtgg 120
agactggtgc accaggccaa gtggncccca cttnccctt tcaaggact ggtgnaaacc 180
aatgggaat tgccccga aaagtgggct cccggggggc cttgagaag ggatcaagct 240
gaggaagctg caaaagctn gtaacaagg aaggggcacc aggccccgtg gttgtgggcc 300
ggaaacaaaa gccaactgc ttgtctc tggcaanaa attggaattg ccnngggntt 360
cnaaaaaaat ccgnaaacc cacttgagg gggcctttt taaaaaaaa ataaaaaacc 420
ccaaaccggc ntttgcctt ntaaaaaac cccaacctt ttggcgnaaa aaaaaaggga 480
aatttgggg ttgtnaaaaa tttntttt tggnaaanct ttcnngggg naanaaanc 540
ctttgaaaa aaanacaann ttttgggnc ttggcccaa aa 582
```

<210> 950

<211> 500

<212> DNA

<213> Homo sapiens

<400> 950

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aacaaagcat caggtaagt acccaaggcc acaaggtgaa gaagttggag tcaccaggt 60
cattctgact gtaaagcctc accacatcac tagcaggaga agatggagaa gcatcatnat 120
ntgacnctg atgaancaa aaattggnct ttttnaaan ngcngncccc anaattctca 180
caagccatcc tgaccatctt gcaagagtgt caggagattt cactgggtt cttgtgatta 240
tattcagaga ttctgtgat gacattgtg gggacttcag ttggaatcac tgnattctt 300
atccacttc cctggatggn cctcagtn ctanccaag gtanaancca anaaggcang 360
ggttacagaa taaagtgtc ntgggaatgc anaaagatat nctactctgc ctgaaggana 420
anaaggcttc tcactnttaa ttggcctt tancccaaac agncccttgg gagnggggaa 480
naaacctga gggggcatt 500
```

<210> 951
 <211> 503
 <212> DNA
 <213> Homo sapiens

<400> 951

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aggcagcaac atccactgg tgggtggtgaa ggatgattga gatacttga ctggaaagct   60
tctagccaag gctgacacat aaggaagatt ttaggatgac ttgttgaat ggatagagaa   120
ggaggaagag catggtatat ggggtctctg ttaccctgaa tggatgaatt cagctgatgt   180
tgaaccaga tgccacctc tcttttcat gattagataa cacatagatt acccacctac   240
gggatggaag ctgttagaag ctggccttc ggagagcaag tggggaggca ggtgatggtg   300
ttcaacgcc ttgctctaag cctcttctc aaagtggcta catatccac ccaaattgcc   360
ttgaaactt ggcaagtca ctgacctga gaagttaagt gctgctggaa cccagctga   420
acacattgtc ctgggaan anaaaaacnntt ngcncctntn tcttccttg catagaaagg   480
gtaaatttgn ttacagctt ccc                                     503
```

<210> 952
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 952

```
agttaaaaat ctgcggttt taattgcacc tgaggatgcc cccctgctct gttcctagct   60
ggtgttcgac aggcggaacg gaaggattga agagctgacc acaatactc ccaagccact   120
gtgcttcta cagcatggcg ccaatacccg tcctttgag aagtggagtc ttgttcct   180
tccttgagt ttggcagga ctctgactat gtcagaggta aatttatgtg acttcgaga   240
ctgggtcatg aaagacaaca ccggttctgc ccagttcctt aaaatgaagg aaggctggca   300
ccatggtgtg aggaagccga aaccacacag aggctgccgt ggatgctcca ccaactgccc   360
actgaggcta accnccaac atgggcatga aaacatntt aaaanaantn ttggccccac   420
ccccccgaat ggnagaaaaa ggtttcccaa aaaaaccac ccncccccc gggactgggg   480
g                                     481
```

<210> 953
 <211> 507
 <212> DNA
 <213> Homo sapiens

<400> 953

```
atattggctc acttactgga tcaaggcagc tacattaca aaaagaaaat aatttgaca   60
gaatcaagaa gtctattata atgtaggtat ttgaaatcta cctccttgc gaacttgag   120
attgatctac agaagaaaaa tcttagcatc taaaggtctg ttctcaggaa aataaaaatg   180
tctatcaatc taccataaac ctgtctgggt tatcaacaac catcaatgag aagaccagg   240
ggaaaattta gggacagaga gcactgtca gacttcatgt ggaaatggaa agctgagcag   300
tcgcttgggt tgaagaaca gaatgttct cactgcactg tcattcagct tccaggaatg   360
ctgcatttca gtgggtatgc ctgtcatcca gccgctaatt cancttgaca aggcccgaa   420
ccaaatcatn ttgaaanccc aannttctt ttacgggngc ctntgaaac aaaatactt   480
ccaaaaaac anacggtttg gtctgga                                     507
```

<210> 954
<211> 487
<212> DNA
<213> Homo sapiens

<400> 954

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cttccaagca agctaagcaa tgtacgttct ggcaaacgga caccaacatc cacgctgcat    60
taatcatcgg tcccacaaaa taacccaaac aagacccaat gactgactga gagaaagcct    120
caagtctgag atgagacgtc tgccctctac agtctgttgt gcccatactt tctctacaa    180
caaagcacac ccgtcactag aaggcaggat acactgtact tcttaagatg tgactcagag    240
aattaacaag gattcttct gcaagggtcaa agatgataaa tatgaatgct aatgtcctgc    300
actcatcagt tactcagtga aagagactac acgtagggtca taaagttcct acttgccata    360
agattaaaca atgggctact ggctttctta ttactgaac atcanaatga aagtcattgt    420
atgggcctgt ntganaaata nnntganagg gtgggttccc aaaaaanccc aaaaaaaaaa    480
aggggggc                                         487
```

<210> 955
<211> 318
<212> DNA
<213> Homo sapiens

<400> 955

```
gtgtgcaaaa tctctccct gggagccaag tggcccccctc agccagcaac agtgacaaga    60
agagatggat aaagtgtat caaatgtctg ctgaccttag tgagggggaga cagagccaca    120
taattgtcta cagaaggat tatccattcc ggtcattgta ctcaaatgct tagaaaattc    180
tgaacattct tcttgcccga gggaaagtac tacgcatga acagaactat ttggtgtga    240
aatccacctg attttaaate ctggctttac cataaacaca ttcgctctgt gactttgagt    300
aaattacttg gctttcct                                         318
```

<210> 956
<211> 515
<212> DNA
<213> Homo sapiens

<400> 956

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gtttttgtgt ggacataagt ttcaactca ttggataaa gaccaaggag agcgattgct    60
ggatcatatg cttcctaccc accaatattg agaaggaagt aaaatggaaa agccaagaaa    120
gaatggtcga atcaggacac catatgtcca ttctggctt ctactcctt ttataaacac    180
aagagtggaa aggtttggct ttattcgaca cctcaaagag gagatgcagg aggatgagca    240
gtctgcagtg caggaggttg gagacaaaga gaaggtgatg tcacagaaac ctacgggcac    300
atggtccctt ctccaagggtg agaaaacgga ggctcacaga agcataagaa catcatctag    360
acacgcacct ggtagtggc aaagccaagg ccagaacang ctaatangtg gnangacttg    420
ncntttctca aaaaaaatt ttggcctttg gccttcnan atgatgctgg aaccaagtta    480
anacttggg aaaccattgg ggaaggcatg actgt                                         515
```

<210> 957
<211> 268

<212> DNA

<213> Homo sapiens

<400> 957

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cataactgac gatngagaag cantacttca tcactcttgg agaattacc nacggncct    60
gngnncccg tccccggnac actttctnat ggattttgtn acnntttnt aaagggggaa   120
aaagccnttt gacctgaagg gcttttaggn agaaaaaaca caaccccggc cctctgtgg   180
tgcagtcttt taacattcac gcngnaccgt gnacccttg gggaacattc atctctatt   240
ttaaaaaaaa tgctttaag gtatcctc                                268
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<210> 958

<211> 426

<212> DNA

<213> Homo sapiens

<400> 958

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ctgccacct ctctatggga tgagagactt gagaaattca atttaatcca attcagcaaa   60
cactgagtat ctgctatgtg ccaggtactg acaggtacca gaaataaaga gatcactgtc   120
ctcgaggctt ggtgagaaag acgagcattt ggaagtgtc taacatcagc ataatgacct   180
gaacaagggtg gcacggagct gagaaagaag cggactttt atttctcct tctgtacaga   240
gtatataaat atattatgaa cagtatacag aataaatgga ataaagtcaa tacctacttc   300
attgccatcc aggncaaaaa ctggagggtt ttctatact tnanaagttc cccatgcac   360
ccttcacaa ttccctcagt ctctaaaaa cgaactacaa tctgaccgt ttgtaataat   420
cgcaac                                426
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<210> 959

<211> 491

<212> DNA

<213> Homo sapiens

<400> 959

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cananctnan ntgaacaaac caatgnncgc ttnaccaag nagaatggga annccnantt   60
tnaaatngg aaaactgggc ccttgggtt cctttcaaa angaggttta aagggcagaa   120
gagcccagaa ccactccaa tggacaggtt ttctaagtt tctccttta aacttaaga   180
gggagtctt tgcactgaga agaactggga atgggcccc cggtcgccga aacatctggg   240
aagaaatccc gtctcattaa agactttcag caaccattgg cctcagggtg ctgtgaaagt   300
gaatgctatg tgccttgtaa ggctaggtga caaaaatggn catgcanttt ncacctgtt   360
ttnttatgg gacgccnctc ttgggaatcc aacctncca taaagcttac tggnggangg   420
aaaccccata nggaagcccc atggcgggaa aggatcacca tgggggaggg taaccagct   480
taacccaagg g                                491
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<210> 960

<211> 519

<212> DNA

<213> Homo sapiens

<400> 960

ggnngcctt ttctgntccn tancnaacan gaccccttt ccccttgcc tactttaacc 60
 tcttggggan gangcaggaa acccccagcc aaggaaaagc tggccagggg agggaaagaa 120
 gaaagccaag ggaaaaggc acccccagaa gaaagaaagg ggcttggggg tccccaagct 180
 ccaaagtgt ctattatct tgtattgaa tatcccaaa ttgaaaaat tcaaaatctg 240
 aaacacttct gatcccaagc attcaagac tctaagagt taatacgaag taagaaagaa 300
 gaagtggag ttaaagcagc tcgtccaag ttctgattt gccatttcc tgtctgagt 360
 ganctggagg tattttntgc caggaatgtg canggttgg ttaccataaa ataaaacatt 420
 gtgncatgg gngggtttgg ctgcaccta tcaaccccat tcactttaag gtanttaaag 480
 cccccagca ttgccattaa ctggttctt ttgggcct 519

<210> 961
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 961

cagatttnat ganaacttac tcactatcat gagaacatgt ntaagggaag ctgctccat 60
 gattcagta ccggencatg gttctgccct tgacacgtgg ggatntcat gtgttcacc 120
 attcaagtg cgatttgggt gangacacan anccaaacca tatnactgc taatgaggaa 180
 actgagncag anaggtntag ngatgtaccc aagtctgcc ggncggngag tggcagagcc 240
 acgttntag aggaggacag cccagccccg caccctccgt gcttccat gtattatgc 300
 cctgcctccc tgttctgtn tccactggaa tggtnaaca tgcaagctt cctccagct 360
 gtngngccag nacatggctt ncttctnct cccgaagcng aatcgcgga agccatagg 420
 tcagaagatc ccagcttct ctgcttgg 448

<210> 962
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 962

cagcagtatc cactatggcc accatctcca tctccacag aataaggaaa ataaaatc 60
 tacgatagac ttttctga agtcaccaa ttactaata actgaggtgt ttcatctgg 120
 ataattcatg cticattatt gggccactat tctctgtt gggttctcc ttgctcctg 180
 tgacaaacat ggggttcaga tccagactcc aggaggtagt gatgttcaa ctttggtaa 240
 catacaggag aaaggccata tgaggacca gcaagaagt ggctatacat gggaagagag 300
 aactcaccag aaaccaacca tgctggcacc ttgatcggg gcctccaga ctccagaaat 360
 aagaaatcta caggagtaag tcagctaaga attctgttac tgggtcgtag aattcagctc 420
 cctccctgtg ggataatga ca 442

<210> 963
 <211> 516
 <212> DNA
 <213> Homo sapiens

<400> 963

gcgtgggac tcnngnncta ctncatntgg gtgggttng ngggggaaaa aaaggaggng 60

gaaaacacnc cactggaaaa ctggntccca ttggggcctg tcntgcttaa aaaaaggccc 120
 agagaggcag tcttgacacc ctatgccca agatctccaa ggattgggtg gcataccac 180
 tccagcacac agaagcatga ggntcatgac tctctcttc ctgacagctc tggcaggagc 240
 cctgggtctgt gcctatgac cagaggccgc ctctgccccca ggatcgggga acccttgcca 300
 tgaagcatca agcaagcttn aaaaggaaaa tgcaaggcga aanaccaag ggtngccaa 360
 gacaagggcc ccaaaggcca agggaaagcag nagantccaa cccttnttg gnaaaaaag 420
 ggccttatac ggagncaaaa aaagcttggtg ggggggggact tcgggaaaaa actaaggaaa 480
 aagaatgccca gtngaagatc tagaaaagcg tgggtg 516

<210> 964

<211> 531

<212> DNA

<213> Homo sapiens

<400> 964

gcacagactt ttgccnngcc ntnnnancna acttaaggnt aanaaccan ggngggggcn 60
 ngtttnangg ccnntaaang ncccccttgc aggtgggaat ggccgcccg gncctactt 120
 actggctctc gggtcgccaa gctttcttgg tgggtaaact tgagggaaaa ctggctggct 180
 ttaatgaatc taaccagaag ggaatgaata attggcttgc tgcccaagg gacaaccccc 240
 acccagtttc acaaagaaaa tcccgtagaa gaagaagaag catctcttc aagggtgaaa 300
 aacantaac ccataagggc cccctttnct ttggggggtt taccggagaa tgaatggtt 360
 tgtnggaaaa ggcantgaca aggtcaagggt ggttaccgtg ccaaanaacn tctgggaacn 420
 tcgacttacc ttgaaattga atgccaagcc tcangccatt gggtaaggc ntggaatgcc 480
 ccttggggcc aagtattta agtantccca cattgactca agttgaaaa a 531

<210> 965

<211> 208

<212> DNA

<213> Homo sapiens

<400> 965

gaaaaaaaaag aagcctggaa atggatcatc caggactgac ttcaatgat gtcaaatcc 60
 ttagcgggtg attatcacc ttatgggcac aagatgggtg ctgctcctt gaggcataa 120
 gaaggataa gcaacaaagg atcatgccta aaacatcact gccaacagc gccacagccc 180
 cccaacaata aaccttcct taaatgcc 208

<210> 966

<211> 440

<212> DNA

<213> Homo sapiens

<400> 966

gatctgagga tcatacccta atagcgacct aaagtgttca ccacttcat gccgaaaaa 60
 atcatctctc ctgggaatag aagatggaga cgatgtcatt ctcatatcaa cagaggaaag 120
 tgaaggcgac aaggatctt ccataacatg tactaattca tgttctctc ttgtcttaa 180
 agtatcactc tgttgagaat taaaaccag tggaggaggt ggttaatgt cttctcttg 240
 cttcacctcc actgtaatag caacaggatg gtgatccaac attacctgta gtgaactggt 300

accagcctgt gcctctcat cccaggttg cctatnacc cccaaaaagc attataatat 360
 gtaaatcaaa tgaagaaaaa gtgtatatt atagcataat ttaatttaa tgtcattaaa 420
 tgataaagct ttaaaactag 440

<210> 967
 <211> 466
 <212> DNA
 <213> Homo sapiens

<400> 967

ggctttccgc ccggggtgaa aacccaaatc aaggtggact gaaagaagaa naaaggttca 60
 agaatgaaca gggagtggcc gtncaaaggg taccagacgc ttggagggaa gccatgggaa 120
 taaaaaattt tggcggggcc attctgctgg tcccagaaat aaagaactac attttccaa 180
 gcctcctttt gcagctggac cncgggcatg tgacccatt ttagggggca tggtaaaatg 240
 ggaggccctg tgtggcagct tttgggaaa cttctttt gaagggggcc ctgttanggg 300
 gnaacttngg aattntttt ttggnccac ttccccac ttcctcatt ttgaanggc 360
 ctaaggcctt ttaaatgaa agctttgggg acccncaaaa gtggaggga ctgcncccc 420
 canggnatg ggcataaggg gtaaagccca nactggtgga ccagtt 466

<210> 968
 <211> 449
 <212> DNA
 <213> Homo sapiens

<400> 968

agagcagaga gcatgatcc ggttcaagac caccctcatg aacacactca tggacgtcct 60
 tcgccacagg ccaggatggg tggaagtga ggacgaaggg gagtgggatt tctactggtg 120
 tgacgtcagc tggctccggg agaacctga ccacacctac atggatgaac atgtgcggat 180
 cagtcacttc cggaaccact atgagctgac ccggaagaac tacatggtga agaacctgaa 240
 gcggttccgg aagcagctgg agccgtgagg caggaaagct ggaggcagcc aagtgtgact 300
 tcttcccaa aacctttgag atgcctttgc gaagtaccac cttgttga gaaggagttt 360
 cgcaaaaacc caggaatcac ctggatcatg aagcctgaca caagaagctc tgacgaccag 420
 aaagatgata tnccggtgg agaactatg 449

<210> 969
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 969

atcacaaatg ccccaactgg gtaactgtca gaacccaaca ccatcaacgc tctgcagaaa 60
 gtaagggggg gagtgaagat gaaaatggag caagaaagag aacttagcat gatgactgca 120
 caccctcagt gaatggcagg cctaagggga gaaatttagg cctgtccac ctcacagtga 180
 aaaaactcaa tggttcctga gactcatact cctctctc cactgtgtag gaggtccca 240
 ggacacatga cagtgaag attgaggcag tcagagggaa acttcgtcta gccccaacac 300
 aggcagagat ggtaggagct nccccccc aacaaggctg aaaggtcgca tggccnccct 360
 gaagctcana atccacagat gatcaagtga aggatgacag aagcaatctg gattatgaa 420

agaattgctc tgaaatatga aagatgattt taaagcctg

459

<210> 970

<211> 441

<212> DNA

<213> Homo sapiens

<400> 970

gttcttactt gaaactgatt taacatatta aggaaaggga tcaattgaaa gaatgggtgg 60
tagctcacag atgactggga agtctgcttt ggatgcctgc tggaacaatg gaggttgaga 120
aacagctagg accccagctg aaatcatgcc tgtctgggtg agcattaaca tgcctccaga 180
agtcaaaact atataaagga tatactccga gaagtattcc tcccttctgt acccactcca 240
tcttgttcct cctagccagc tcttgaagag gcggaaattc actctaaaca ggagaagcag 300
caatgagaac ttaagaaga gatataagcc tcatccaana tcacctgcag aggaggacga 360
gggaaatttt atatgggaac aattatctga aaaatagaat gtcctcattt gtatgggcaa 420
ggctgggttg caaagaagtc c 441

<210> 971

<211> 442

<212> DNA

<213> Homo sapiens

<400> 971

atacgtgaaa ttccggtaat aagggacaaa atgggtaagc tcttgattg agactaagga 60
tggagatggg gccatttaga atgccagat tcaagaggca agtagaaagg agagttgacg 120
aagggtcccg agcagggaca gctggaaaag cagagctggt ggaacttga gagctgtggc 180
ttcctgtggt tgttgaaggt gacggtcadc ttgatcctgg ctgggcagtg ctggagcagc 240
ttccccacct ggggatcica ctggctatcc ttctctcaa cttggatgtt tagntggctt 300
tttatttctt tggttattgg tgctattggc ttgggtggg ggggtaattt cttatttgg 360
gacttttagc acataaagtt ggagataatg aatgggaaca gaatgggaaa gactggatat 420
aatgatacac cacataccct cc 442

<210> 972

<211> 440

<212> DNA

<213> Homo sapiens

<400> 972

agttttcgaa gaactccagg aagtggctgc agagcaaagt aggatcctga tactgagctc 60
aagtattca gaatgaaaag accttggcac agacctgtta aggaagctcc atataagggc 120
caccgggggt ggctgagtc gaataccagc catgtggcat gtcgcatggg gcaagagctg 180
tgctgcccat gggagtccag agaaggagca cactaaggac caacaccagc attgtctta 240
ggggaagcct gcagctatgt catgaggacc ctcaacagcc ctgtgcagag gactatgtgg 300
catgaaagat gccttttgc cacaaccag cccacttgc caagcatgtg aacaagctaa 360
actgaaagca gatcttcagc cccaatcaag ccttcagatg acagtaacct cagccaatat 420
actgactata acctcataaa 440

<210> 973
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 973
 actcttttgt gttaggtttc ctgacaatga aagagatact agaataatg aagaactacc 60
 atgatctcca cagcatcccc tctcgtgga tgggggacaa cgagatgggt gctttcccag 120
 agctcctgtg gaggactgtg aagatgggtga ctgcccctca atgtatcatc ttacaaaca 180
 tttccttggg gtctgcagag ctgaagacac tcattgggtc tctttctgg gaatgcact 240
 ggagataatc cccatcaagc gcattttcat cgcaactgag tctagtgcag gcatcaaatt 300
 ctgagcaacg ggactattaa ggcagccacc attttnttc aggttcagng caatcaccaa 360
 tatggctact gaccaagtcc atcatctga gtccctcaa cagctgcaag ttctgttct 420
 tgccctc 426

<210> 974
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 974
 ctttcatagg tcactacaat ccagtgccaa cacagcattg ggtggatccc atgagatttc 60
 aaattccaca aagaaaaaat ctacttgggtc ctcaacatta ctccaagat tgctggagt 120
 cactgtacca ataaaaactc atggacaaga aaacagaaac tagaagtga ggacttcaat 180
 atccaagaag atgggtgtagc ctcaagatag aaaaagccca cacttctgaa acatcattg 240
 aaaggctgct gaagacctgc atcacatgag gttatcaaac tacagccac agaccaaatt 300
 cagcccacca tctnttttga agggcagggt gcncatcat gaggatatca agacatccta 360
 tggtagggcc tgtgtgacag gaaactgagg cctcctgccaa aaagccctgc gaatgagcca 420
 tcgagg 426

<210> 975
 <211> 427
 <212> DNA
 <213> Homo sapiens

<400> 975
 gtgcccagac actgcttcag gagcctgagg aacgcagtgg cttttctatc atgacctgac 60
 ctgggcttct cagcatgaag acagagctgc attcctggga ttctaagaa gaaaagaaga 120
 ttctgtcaag cctgtgttca atcaaaatat cctcccctac atgactgccc cccactccct 180
 gccgcaccac ctttctttt ctgtttttt attgctgtta atgtttaaca tgaaaataag 240
 aatgatgtaa cccaggatcc agaagccaat acaaaactcaa agcaattga gttttaact 300
 ttgccctatt tcattggggg ggaaaccaag gtcattaagc atgacttgg caagcacatc 360
 aagtgtgtca acacatctta aattacagct gtcaattagt tacctgaaga cttaatatgc 420
 caagctc 427

<210> 976
 <211> 439

<212> DNA

<213> Homo sapiens

<400> 976

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gtgggggtctt tcactgggat ggcctgtcaa ggagcaaacg agatcagatc agagagaaca   60
ggagaaagag ctctgtgcat gtggcttgct gtacatgatt tacaaaatga aactcttcac   120
actgaacctg gggtcatcct tggagcaata tatgaaagaa aacagaaaac agccacagga   180
gcctggaggg acagaggagc tggtcgcttt gtggaccact gtacacctga gaaaggtgac   240
tcttgaaagg aaaagaggtt gcttgacgta cccittgaag ttcacgggca ctgcaaagaa   300
tgcatttttg tagcttgatc cacctnaaa tgccanatt catccacatc tgcagcttat   360
gtcaggggc tggcagctaa cagaaacat cagatctgcc ttgttttct tatcaaatca   420
tatgtataa tgcacaac                                     439
```

<210> 977

<211> 443

<212> DNA

<213> Homo sapiens

<400> 977

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aaaagttgc tgacgcctga tatggagcac tagaaagaaa ttattttcc aagcatcaac   60
ccggaagtcc cagcataccg aggggtggcag acatcatttc tcaatgaac ttagtattta   120
gaaagatata ttcactccaa gcatcaagtc tttctgtcc tgcaaaagtc ttaagtcaaa   180
ccagaatcca ctagtagagg gcaccttgg attcaacagt aaaaggagaa tctacaaaac   240
cagtcataca aaaggatatt gaatgaagct atgatactg tagcagttac tgccatttg   300
gaccataaaa ctgacaatcc ttaacaatt accaggaggg cagagcggaa agaacattga   360
tgtcatcact gagttgctgg attaccttac ttagaaaata gccaaactcg catgnttggg   420
tatttttta aaaagtcttc ccc                                     443
```

<210> 978

<211> 433

<212> DNA

<213> Homo sapiens

<400> 978

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acacagagtc tcactctgtt gccaggctg gggtacagtg ctgcaacgtt gtccaagatg   60
tctggaacte ctggcctcaa gcagtcctgc agtcttagcc tcccaaatct cttggattat   120
aggaggggag caccatgccc agccctgcag ttcttttaa tacatgatg gtgcttacat   180
ttggcactga attgttctgc cattatgggt tgcataagg agaagaaaaa tctccttgaa   240
cacacgggta aattgataaa ttgaaaaga tcatatggag ttgcaagcac tctattgata   300
actacttatt tgngntttaa caactatctt ccatgactnt cctaccttct tttccaagt   360
caatttctta aatgaccagg acatcataca ccataatccc catatacaca aataacaaat   420
aaacgttctt tta                                     433
```

<210> 979

<211> 386

<212> DNA

<213> Homo sapiens

<400> 979

gaactatgcc caggcagaaa aaaagtact gtaggtgatg aagccagtgc tccctgaacc 60
aaataaaccc tatcgacgtt accgaactgc cgggcaaac cagagcaact cacttacttg 120
gaagggtgaaa aacacttcaa catactccag gcggaaccg acacttaggg gccaggcaga 180
tgaaacacca ttgtttaaa aagtctatta tticactgtc tcttcaaca aggggggaaaa 240
ctgagtgtt aaacactgag ataatgcccc cttactaaa cctatgattc actaataagc 300
agggtcaatg gccattcata aactttaaag aaaggaatta ccgaagcccc ttgcttnaca 360
aaattcccc aagaaacaga aagagc 386

<210> 980

<211> 260

<212> DNA

<213> Homo sapiens

<400> 980

actgaaaggc agagcaatga gaagcagaac tgcagagaca aggattccag gtgcttgaa 60
gtgagggtgg agccagcccg ggaaaagatt cagccccaga cggctgcacc aggtggagca 120
aagatgtctt ctttttata catgtcaact agaagggtac aagagacagg agcccatgat 180
cttaaagctc cctgtgttac ccagcacccc tgtaagattt cctaatactt cttttataat 240
taaaaaaaaa atattttcat 260

<210> 981

<211> 426

<212> DNA

<213> Homo sapiens

<400> 981

ctttatacaa ttattccaa atcttctaaa ctgacagtga gggagagtaa ttgaaagga 60
ctgctcaact caacgtcatt tgaagattg caccacagct gcattttcc aatttcctgg 120
catctattct gctctcctgg acttttcaa aacaattgta agtggatgaa taaatataat 180
aactgattcc attgatactc ttagaccatc ctttggaact tctgctttg gacattttac 240
agtttaaaat ttatttatca tctatcgatg ttcccaaag aaggactcaa agtacacatt 300
gtcaaagatc tcatggatct aantaagggc cggggaacca ggtncagaat catacattgn 360
ctctacacag aggggataat ttctgaagga aagaagaag taaattcctt aatcacctt 420
ctggcc 426

<210> 982

<211> 440

<212> DNA

<213> Homo sapiens

<400> 982

gtctcaaca agttttccct tctcacgta cagcctgtat ttctggtgac actgtgtccc 60
cagaacccta ccttgctcc tgagaagctt gactggtgag gagcagggt gacttctgt 120
taggcccagg aacatccaga ccagcactg cctactctg gattattggg gcagacatgg 180
ctgctggatg ccatgtgcat gtgcagaaca tcagcaaatg gacacagtga tcctgaattg 240
tatgcccgtg tgcagcggat cacctctagc cagcacagca cttaactga caagcccaga 300

taccacccac agtcaccaac atgcagaaaa ctttgcttta acatgggaga gacgggtctc 360
catgttttgn ctttaagccc ctttcttgaa catcaccacc tggagcctac attctgngct 420
gnattggctc cctgtaaggt 440

<210> 983
<211> 439
<212> DNA
<213> Homo sapiens

<400> 983
tgctgtgaca gtgtcttaag tagggcatgt ttagatagtg aaaaggacgg caaactcgag 60
gtgtgtattc aggaagaagc agattccaag atggaagaga aaatatcgag agaaatatgc 120
cgagagaaga atccaggcag aatggaatcc aggcagaatg gtgaatggaa ggttcgggtg 180
accaagagaa aggaaggggtg actcagcaag tctgtagttt cagctctgt atagtaccgt 240
tatacttgaa aagctgaagc ctttctcgg ggaagagtca gaacggcctg gagggcttgc 300
taaagcgctg ctggttggc cccnccccg tgaatgacta atggagactn tgagggccgg 360
ctggtatttt gagtttctaa caagccctgt ttcgatgctg gtacagccga tctanggaaa 420
atattggaac aaggaaaaa 439

<210> 984
<211> 439
<212> DNA
<213> Homo sapiens

<400> 984
tccgngcca cttttatcta ctggaggctc cctgccaca tggectcatc caaagcagtt 60
tgcttcttca aagtcagcag catcaattgc tctacaattt ggagatatca gacgaacaga 120
gggaaaatgc agtcagtggc ctaaagctgc ccctaggaa atctaaggct atatctggtt 180
ccataaagtc ttgatcant cagtcanaac aactgcagca ttctgccgc tcagaatacc 240
ttaatggcct tagtagctga ggtcctcaca gactggcaa gagcaaatg gcattggaat 300
gggaggactg aacaagacgg aagaaacca agactctntg gtcattgcag aaggaagaat 360
gagagcccaa gcctgaggaa gataaaatga gatgatttg cttaatatga attaaggcag 420
ctgncagtgg ttctgtaaa 439

<210> 985
<211> 444
<212> DNA
<213> Homo sapiens

<400> 985
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tactttctc catctgtaa gaagtgcagc tctaccactg gaagcatcca ctctggctc 180
actccatcc ctagtgttaa aggactctct aagagagaat gtcagcacag ttttgacaga 240
aacactctaa aactcctgga tattccagaa aaattaactc tgggcaaaag aacattggca 300
tcaaagnaaa gctcaattta tacaccatta gccantttt gatagctata aacctgacac 360
gcaaatagga atattttatg gcataacact accgtttaca ttaaagtgtc tttaataga 420

atatgtaatt tagaaatata aaag

444

<210> 986

<211> 442

<212> DNA

<213> Homo sapiens

<400> 986

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gatgatcata aggacacaag ataaggaaat ccaatcagtt gctacgtgct gatgattctg  120
attctggccc tgcagtatcg cttgcatgca cctcctcctc cctgtgctca ctgctggaga  180
aaagagaacc ttggctgatg atttatggat ctacaagtaa tcgaagctta actgccacaa  240
aaataacttt atccagtcct cccccctcc cctgcacctt ctctagttag cgctgtaaga  300
acttgggtgc tcagggtggaa ggcatataaa attgnattgn attgaataa gctcccagg  360
tagcacagta atgtctctgc acttgattaa ataagtcagg tcaattttc tgcaagtttt  420
cctccattgc agcactaaca tt                                     442
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<210> 987

<211> 219

<212> DNA

<213> Homo sapiens

<400> 987

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gnacattgat acatcccatg aatgaagaat atggagaatg aatgtgatca cttacagaat   60
attatccagt gacatatatg ttaaaaaact atgacatttg aacccttatt aatcataaaa  120
ctgttcattc ttgaaaagg agaatgattc ttgttaaatt caaactccat ctgtattatc  180
aataagagta tctcagattg agtttcacac atcgaaact                             219
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<210> 988

<211> 178

<212> DNA

<213> Homo sapiens

<400> 988

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gaattctcca gggacttata agagttgctg gaagaaaaca gctgaggatt gagcacagtg   60
aactaatttc ctcacatctt tgaataagca gaagttggtg aaaaggaatg taaatattct  120
tatggtaaaa tgagttcaaa aagaatcctt aaatccttaa aattaataaa ccaataaa   178
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<210> 989

<211> 536

<212> DNA

<213> Homo sapiens

<400> 989

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ttttctcaga catcaagcag agccttccat ctaccccggc ctctcaagaa cttcactctc   60
agcatctgcc agagtctacc ttctcactt ctaccctcca ttcccaaaga gcaagaaggt  120
ggatatgtgc cagaaaaagg cttagatcc ttacctcag tctttaatt ttaatcatt   180
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ggaaagagaa ggaatgagtt acaggagaaa gaataatgga ttgctgtca gaaaccaaga 240
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 atctcataaa acttcgatat cctcatcagt aaagcaaaat agcacacttg ttactgtga 360
 ggtgcaaaat tcgtcaaatg cctttataaa ccacatgggtg ccctgtgaat gtaaacagta 420
 tgatgtggat tcctctaaca ctgatggcga agtggcactg aaagggcttc ttaagcttca 480
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<210> 990
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 990
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 ctccaaagt gaaaattaac aatagaggc agcctaaaaa agcaatgtt ttccactac 120
 tatctattat aaactgtgct ggatataatc accttgggg aatgaaatg ttccccaca 180
 ctatgtaatt aaagacgaag gggaagagga ggaaaggaga aggggagaaa gtatatacca 240
 aaagaccaat aaaatgctt caaggagatt 270

<210> 991
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 991
 nagccaaggt atacccatgc tgggccatcc tcctcaatt aaatgcagtt gtgcaaacca 60
 ggaaggagag aggagcatgc gnctgactgc acgcggtaa cacactcgg cgccccaga 120
 aacagtctc ctgcagcagg tgcctcagaa atgagcttct ctctccaggc tcatgctctg 180
 acacttgact ttctcagctg taagatggga ataacagtgg cgccttccat gtagatatat 240
 gttaggggtg atgagatggc gtctggcata aaatcaatgc tcaagg 286

<210> 992
 <211> 137
 <212> DNA
 <213> Homo sapiens

<400> 992
 ncagtgttaa cgtaaaccac gagccccaca agaagtcatt aaagctgtgc tgtaagagg 60
 ccagagcncat ataaaatagg cnagaaacan ggnccttgaga aacatgctgc tgcctcaaa 120
 aacaaccttg caaacac 137

<210> 993
 <211> 430
 <212> DNA
 <213> Homo sapiens

<400> 993

tttnaggatc tgaagctgag ggaattctac tgtgaggga acccactgtt cctgcagcag 60
 ccagtgattt ctacacagca ggagaacgtc tggagtctac aggaataac atcaagattt 120
 gtaatgaatc agctagcaga aaataaccct ttctaattgg atgacataga acggtacca 180
 caagtcagga gcatgatctc tcagggaaaa acatgtgcaa tatgtggaca gtactttata 240
 accgtatggc tggaatgtgt tcgatttgtt cctccaccaa aggactggaa gataagcaag 300
 aatctgaagc tggtcctct ccaagtatta attgttctt acaaatgttt tactcaacgt 360
 gaccctaacc tcttggaaat tgctcangtg tagaacaggt gaggtgtctca ttcatagcct 420
 cactccactt 430

<210> 994
 <211> 67
 <212> DNA
 <213> Homo sapiens

<400> 994
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 agtttgc 67

<210> 995
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 995
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 atctggaagg ccaagctgct ctctgcatcc tcttactact ggtaaccact tcaagtcctt 120
 tatgtataga atgtccagg ggggtgggtc tggcactcat ctctttattc cacaatctcc 180
 actggacaca ggtcatgttt tagaaacatt tctcttaaa tcagtccttt acttgattgg 240
 agacagacag gaaggaagta cacacctgca cttcaataa aaggaagaaa ataaaagtgc 300
 ttaacattc 309

<210> 996
 <211> 447
 <212> DNA
 <213> Homo sapiens

<400> 996
 atttagtcaa tgggaacccc ttcaagttgg ctctttgtc ttttggcat gtcccatcat 60
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 gacggcttca ggaagtgatg gatactcctg cagaagcaga tctctgcccc tggacagatg 180
 gggaaaggct actgggaagg cagttagtgt ctgctgcagt gcacacaaaa atgggaagca 240
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 gacaggattg tatcaatagg tattggttcc taataaacat ctgacacctc aaattccatc 360
 ccagaatctg ctccagaga acccatctta taccaagacc ctgatgatcc cagtcattctc 420
 aagtatttcc tgctgaagtt ccactct 447

<210> 997

<211> 373
<212> DNA
<213> Homo sapiens

<400> 997
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gcacgtgacc agcattctca ttcccactc acattcggat ctcggtctc aggctacatt 120
ctggtcagga tgaattacat gtataattca aaatcaagaa agctgttcaa gtacaacgtg 180
tgaggcttct gccaacgtcg aaattcatta ggaaccatga tttggctga gcacatggct 240
ctgttttgag ctcttttatt ccggtgttat tgctcattca cttaaagnga aatacgtgag 300
tcagagacaa gatctctttc cctttcatg ttctccaat ttatctccct tggcataata 360
aatatctcaa gcc 373

<210> 998
<211> 432
<212> DNA
<213> Homo sapiens

<400> 998
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ctccactgaa gaaggaattc atgaatttta caagtataat caaagaccac caagaaattt 120
ttacttttc ctcaaaaagc taagtgtagt gtagcacccc ctgcccatag tctaagttac 180
agaagaatac taactgctg tttttcttc tgtgtgtga gccttatctg ttctcaccag 240
tttcacattc ctgaggctc agtgagtcc tgctgcacct ccctagcaca gctgcaaagt 300
tacaagggtg atatgccgta tgttacagaa acatagtttc ccaaggatgt ggaacatgta 360
gtatagataa atgtaaaaga ctgatcaact gcctttgttc tcgcttgtgt aagtagactt 420
catgaatcac ag 432

<210> 999
<211> 300
<212> DNA
<213> Homo sapiens

<400> 999
actcggcaga ctgattaaag gacaggggtca cccatacaca ccggagctca gaaaaagtgc 60
acgtaccttc cacacagcga cagccctctt gcagcacccg tgcatacata tccactttgg 120
actgagaaaag gagctgggtc ccagtcagct caagccacgt gacctgttc ctcccacttc 180
accttctacc atgagtaaaa gctccctcca gcctccccag agaagccaag cagatgctgg 240
caccatgctt ctggtacaac ctgtagaatg tgagccaatt aaaactcttc ttataaatt 300

<210> 1000
<211> 307
<212> DNA
<213> Homo sapiens

<400> 1000
aggctgtaca tgctgectcc ttggtcctat gaaggtgcc aacacacaac aagctacacc 60

agggaagaac tggagtgtat gttccttatg atacacttga aagcccaact gcagggaacc 120
 tgaacacatg gatctgcatg ctagtgaac actgcacgct ttatattgca cattttagt 180
 ggaaaatact atgactgtac ctggcaatat ttccataaat attatcctgg aattccattc 240
 atattcttag aaaataattt agcaggagca aaaaaaatg aataaataaa tagccatgtt 300
 caaaaac 307

<210> 1001
 <211> 285
 <212> DNA
 <213> Homo sapiens

<400> 1001
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 ttacaatgca aattgaattc ccaaccttgc agaccatctg ccgttaaaag tgagggcata 120
 gattgggaag gaattctgcc ttggactcc gatgccaaca tcagctcttc ctgggttctc 180
 cagtctgtgg cctgatctgc agatttcaga ctggccatcc ccacaatcgt gtgagttgat 240
 tccttaaata taattcttta aaataaatct tcccccttc tctac 285

<210> 1002
 <211> 73
 <212> DNA
 <213> Homo sapiens

<400> 1002
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 gggattctgt ttc 73

<210> 1003
 <211> 277
 <212> DNA
 <213> Homo sapiens

<400> 1003
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 tggacccttg ccgcccccca cctctccac acacaccag tccaggggtc ccctttatca 120
 cccttggctt gcaactcaa aagaagttgc ccacctctg agtcacaaca caaggctgaa 180
 taattctct agatgaaaga tcagtttcat ttcaaaacga gaatagggtc cttttttat 240
 ttctccaca tggtagaaaa taaacagaat ttgcttt 277

<210> 1004
 <211> 445
 <212> DNA
 <213> Homo sapiens

<400> 1004
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 gcatagaac tctctgatg ttgctcccag accgtgacct gtgctggcaa agcttctatt 120